

FUBARA 09/762,039

=&gt; D HIS

(FILE 'HOME' ENTERED AT 13:15:14 ON 15 OCT 2001)

FILE 'HCAPLUS' ENTERED AT 13:15:23 ON 15 OCT 2001

L1 54 S SCHEHLMANN V?/AU  
 L2 18565 S KIM S?/AU  
 L3 183 S SANNER A?/AU  
 L4 343 S L1-3 AND CATION?  
 L5 56 S L4 AND POLYMER  
 L6 0 S L5 AND CO(W)POLYMER?  
 L7 10 S L5 AND (HAIR OR COSMETIC)  
 L8 7 S L7 AND ?ACRYLAT?  
 SELECT RN L8 1-10 7  
 SELECT RN L8 1-7

- inventor search

FILE 'REGISTRY' ENTERED AT 13:20:37 ON 15 OCT 2001

L9 67 S E5-71

FILE 'HCAPLUS' ENTERED AT 13:20:50 ON 15 OCT 2001

L10 7 S L9 AND L8 7 cites w/ 67 compounds displayed  
 S PACR/PCT

FILE 'REGISTRY' ENTERED AT 13:44:11 ON 15 OCT 2001

FILE 'REGISTRY' ENTERED AT 13:44:19 ON 15 OCT 2001

L11 252975 S PACR/PCT  
 L12 8265 S L11 AND "AMIN"  
 L13 STR ← comp A  
 L14 SCREEN 2043 AND 2127  
 L15 50 S L13 AND L14  
 L16 STR ← comp B  
 L17 50 S L13 AND L16 AND L14  
 L18 1732 S L13 AND L16 AND L14 FULL ← all polymers w/ components A & B  
 SAVE L18 FUB039B1 FUB039P/A  
 L19 16 S L18 AND L9  
 L20 51 S L9 NOT L19  
 L21 1681 S L18 AND NC>2  
 L22 38742 S L11 AND ?AMINO?/CNS } all cpds that are polymers w/ a vinyl &  
 L23 71943 S PVIN/PCT AND N/ELS } an amino  
 L24 1674 S L21 AND L22-23 } group  
 L25 160 S L24 AND SI/ELS ← comp A, B, C & D  
 L26 1514 S L24 NOT L25 ← comp A, B & 7 (comp C)

FILE 'HCAPLUS' ENTERED AT 14:11:53 ON 15 OCT 2001

L27 1229 S L26 > comp A, B & C  
 L28 34 S L27(L)CATION?  
 L29 136 S L27 AND (?SILICON? OR ?SILYLOX? OR ?SILOX?) ← searching for text  
 L30 171 S L27 AND ?CATION? modification to find  
 L31 39 S L29 AND L30  
 L32 37 S L31 NOT L10  
 L33 28 S L32 AND (HAIR OR COSMETIC) 28 cites  
 L34 1189 S L27 NOT (L31 OR L10) w/ A, B, C & D  
 L35 131 S L34(L)?CATION?  
 L36 27 S L35 AND (HAIR OR COSMETIC) 27 cites w/ A, B & C; still covers  
 L37 0 S L36 AND (TERT OR T)(W)BUTYL cl 1 when silicone = 0%  
 L38 29 S L34 AND (TERT OR T)(W)BUTYL  
 L39 707 S ?ACRYL?(4A)(TERT OR T)(W)BUTYL  
 L40 5 S L39 AND L34  
 L41 29 S L38 OR L40  
 L42 10 S L41 AND (HAIR OR COSMETIC)

FILE 'REGISTRY' ENTERED AT 14:29:28 ON 15 OCT 2001

L43 STR L13  
 L44 3 S L43 SSS SAM SUB=L18 3 cpds w/ anti Butyl ester  
 SAVE L44 FUB039S1/A

FILE 'HCAPLUS' ENTERED AT 14:31:28 ON 15 OCT 2001

L45 2 S L44  
 L46 2 S L45 NOT L10 > 2 cites w/ R2 = tbutyl

L47 10 S L42 NOT L46 10 cites

FILE 'REGISTRY' ENTERED AT 14:37:56 ON 15 OCT 2001

L48 STR L43

L49 90 S L48 SSS FUL SUB=L18 ← 90 compounds w/ t-butyl ester

FILE 'HCAPLUS' ENTERED AT 14:39:40 ON 15 OCT 2001

L50 56 S L49

L51 44 S L50 NOT (L10 OR L46-47)

L52 39 S L51 NOT (L42 OR L36)

L53 18 S L52 AND (HAIR OR COSMETIC)

L54 5 S L52 AND ?CATION?

L55 4 S L53 AND L54 4 cites

L56 12 S L50 AND (?SILICON? OR ?SILYLOX? OR ?SILOX?)

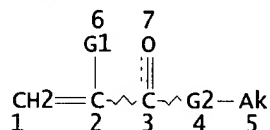
L57 9 S L56 NOT (L10 OR L55 OR L36) 9 cites

FILE 'REGISTRY' ENTERED AT 14:44:25 ON 15 OCT 2001

SAVE L49 FUBS2/A

(I search it again)

=> D QUE L27  
 L11 252975 SEA FILE=REGISTRY ABB=ON PLU=ON PACR/PCT  
 L13 STR



*Component A*

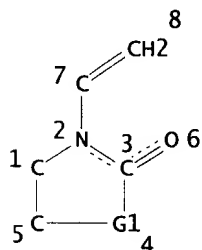
*any AK up to 10's*

N~Ak'  
 @8 9 Ak @11

VAR G1=H/11  
 VAR G2=O/8  
 NODE ATTRIBUTES:  
 CONNECT IS E1 RC AT 5  
 CONNECT IS E1 RC AT 9  
 CONNECT IS E1 RC AT 11  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED  
 ECOUNT IS M2 C AT 5  
 ECOUNT IS X10 C AT 9  
 ECOUNT IS X10 C AT 11

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE  
 L14 SCR 2043 AND 2127  
 L16 STR



*Component B*

REP G1=(1-3) CH2  
 NODE ATTRIBUTES:  
 CONNECT IS E2 RC AT 7  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RSPEC I  
 NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE  
 L18 1732 SEA FILE=REGISTRY SSS FUL L13 AND L16 AND L14  
 L21 1681 SEA FILE=REGISTRY ABB=ON PLU=ON L18 AND NC>2  
 L22 38742 SEA FILE=REGISTRY ABB=ON PLU=ON L11 AND ?AMINO?/CNS  
 L23 71943 SEA FILE=REGISTRY ABB=ON PLU=ON PVIN/PCT AND N/ELS  
 L24 1674 SEA FILE=REGISTRY ABB=ON PLU=ON L21 AND (L22 OR L23)  
 L25 160 SEA FILE=REGISTRY ABB=ON PLU=ON L24 AND SI/ELS  
 L26 1514 SEA FILE=REGISTRY ABB=ON PLU=ON L24 NOT L25  
 L27 1229 SEA FILE=HCAPLUS ABB=ON PLU=ON L26

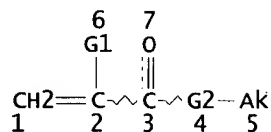
FUBARA 09/762,039



=&gt; D QUE L45 3

L13

STR

*comp A*N~Ak  
@8 9

Ak @11

VAR G1=H/11

VAR G2=O/8

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 5

CONNECT IS E1 RC AT 9

CONNECT IS E1 RC AT 11

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS M2 C AT 5

ECOUNT IS X10 C AT 9

ECOUNT IS X10 C AT 11

GRAPH ATTRIBUTES:

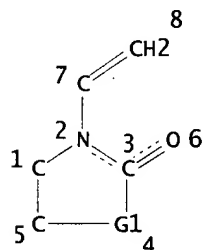
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L14 SCR 2043 AND 2127

L16 STR )

*comp B*

REP G1=(1-3) CH2

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 7

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

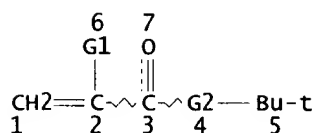
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L18 1732 SEA FILE=REGISTRY SSS FUL L13 AND L16 AND L14

L43 STR

*next page*



← t-butyl group short cut.

The answer set was  
too small so I searched  
it again w/ the t-butyl group  
drawn out

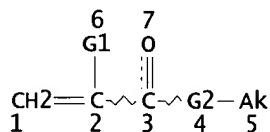
N~Ak      Ak @11  
@8 9

VAR G1=H/11  
VAR G2=O/8  
NODE ATTRIBUTES:  
CONNECT IS E1 RC AT 9  
CONNECT IS E1 RC AT 11  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED  
ECOUNT IS X10 C AT 9  
ECOUNT IS X10 C AT 11

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE  
L44      3 SEA FILE=REGISTRY SUB=L18 SSS SAM L43  
L45      2 SEA FILE=HCAPLUS ABB=ON PLU=ON L44

=> D. QUE L50  
L13 STR



Research for  
t-butyl group

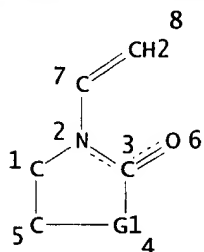
N~Ak  
@8 9 Ak @11

VAR G1=H/11  
VAR G2=O/8  
NODE ATTRIBUTES:  
CONNECT IS E1 RC AT 5  
CONNECT IS E1 RC AT 9  
CONNECT IS E1 RC AT 11  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED  
ECOUNT IS M2 C AT 5  
ECOUNT IS X10 C AT 9  
ECOUNT IS X10 C AT 11

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE  
L14 SCR 2043 AND 2127

L16 STR

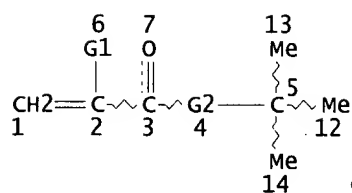


REP G1=(1-3) CH2  
NODE ATTRIBUTES:  
CONNECT IS E2 RC AT 7  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RSPEC I  
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE  
L18 1732 SEA FILE=REGISTRY SSS FUL L13 AND L16 AND L14  
L48 STR

next page



N~Ak  
@8 9

Ak @11

*t-butyl group*

VAR G1=H/11

VAR G2=O/8

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 9

CONNECT IS E1 RC AT 11

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS X10 C AT 9

ECOUNT IS X10 C AT 11

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L49 90 SEA FILE=REGISTRY SUB=L18 SSS FUL L48

L50 56 SEA FILE=HCAPLUS ABB=ON PLU=ON L49

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=&gt; d ibib abs hitstr 1

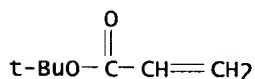
L10 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:645684 HCAPLUS  
 DOCUMENT NUMBER: 133:238520  
 TITLE: Polyureas and water-soluble or water-dispersible  
 polymeric salts, their preparation and use  
 INVENTOR(S): Nguyen, Kim Son; Sanner, Axel; Hossel, Peter  
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany  
 SOURCE: Eur. Pat. Appl., 27 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1035144	A2	20000913	EP 2000-104984	20000309
EP 1035144	A3	20010905		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1269374	A	20001011	CN 2000-108606	20000311
JP 2000336141	A2	20001205	JP 2000-69199	20000313
PRIORITY APPLN. INFO.: DE 1999-19910996 A 19990312				
AB The polyureas, which contain .gtoreq.1 ionic or ionogenic group, are derived from (a) a polyoxyalkylene diamine composed of oxyethylene and/or oxypropylene units, (b) an amino or OH group-contg. polysiloxane, (c) .gtoreq.1 diisocyanate, optionally (d) an ionogenic di- or polyamine, and optionally (e) an addnl. diamine of mol. wt. 60-6000. The polymer salts are composed of a cationic or anionic base polymer and a complementary neutralizing polymer, one of which is a polyurea as described above. They are useful, e.g., in cosmetic and pharmaceutical formulations, esp. hair sprays. Thus, a CO2H-contg. base polymer (I) was prepd. from 0.5 mol of a polyester diol from adipic acid, isophthalic acid, and 1,6-hexanediol, 1.0 mol neopentyl glycol, 1.5 mol dimethylolpropionic acid, and 3.15 mol IPDI. A neutralizing polymer (II) was prepd. from 3.0 mol polyethylene glycol bis(2-aminopropyl ether), 0.2 mol N-methyldipropylenetriamine, 1 mol Tegomer A-Si 2122 [an aminoalkyl-terminated poly(dimethylsiloxane)], and 4 mol IPDI. A 9:1 (by wt.) I-II salt was prepd. and used in an aerosol hair spray.				
IT 154838-98-9P, Butyl acrylate-tert-butyl acrylate-methacrylic acid copolymer 259795-47-6P 292621-96-6P, Adipic acid-dimethylolpropionic acid-1,6-hexanediol-IPDI-isophthalic acid-neopentyl glycol block copolymer 292621-98-8P, Adipic acid-dimethylolpropionic acid-hexamethylene diisocyanate-1,6-hexanediol-IPDI-isophthalic acid-neopentyl glycol block copolymer				
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation) (base polymer; polyureas and their water-sol. or water-dispersible polymer salts)				
RN 154838-98-9 HCAPLUS				
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and 1,1-dimethylethyl 2-propenoate (9CI) (CA INDEX NAME)				

CM 1

CRN 1663-39-4

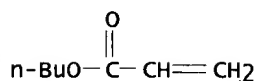
CMF C7 H12 O2



CM 2

CRN 141-32-2

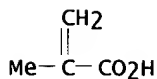
CMF C7 H12 O2



CM 3

CRN 79-41-4

CMF C4 H6 O2



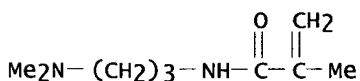
RN 259795-47-6 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and  
1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 5205-93-6

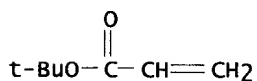
CMF C9 H18 N2 O



CM 2

CRN 1663-39-4

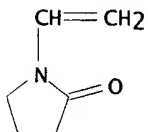
CMF C7 H12 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O

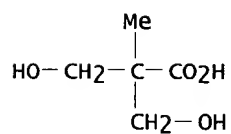


RN 292621-96-6 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol,  
hexanedioic acid, 1,6-hexanediol, 3-hydroxy-2-(hydroxymethyl)-2-  
methylpropanoic acid and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-  
trimethylcyclohexane, block (9CI) (CA INDEX NAME)

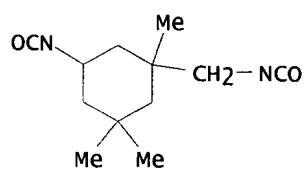
CM 1

CRN 4767-03-7  
CMF C5 H10 O4



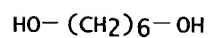
CM 2

CRN 4098-71-9  
CMF C12 H18 N2 O2



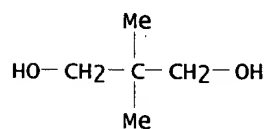
CM 3

CRN 629-11-8  
CMF C6 H14 O2



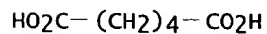
CM 4

CRN 126-30-7  
CMF C5 H12 O2



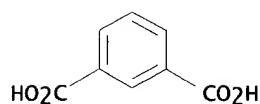
CM 5

CRN 124-04-9  
CMF C6 H10 O4



CM 6

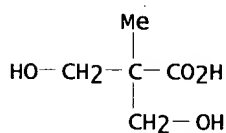
CRN 121-91-5  
CMF C8 H6 O4



RN 292621-98-8 HCAPLUS  
 CN 1,3-Benzenedicarboxylic acid, polymer with 1,6-diisocyanatohexane,  
 2,2-dimethyl-1,3-propanediol, hexanedioic acid, 1,6-hexanediol,  
 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid and  
 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, block (9CI)  
 (CA INDEX NAME)

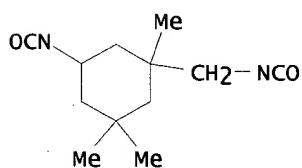
CM 1

CRN 4767-03-7  
 CMF C5 H10 O4



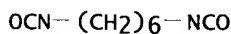
CM 2

CRN 4098-71-9  
 CMF C12 H18 N2 O2



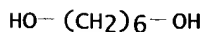
CM 3

CRN 822-06-0  
 CMF C8 H12 N2 O2



CM 4

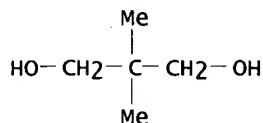
CRN 629-11-8  
 CMF C6 H14 O2



CM 5

CRN 126-30-7  
 CMF C5 H12 O2

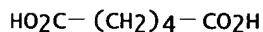




CM 6

CRN 124-04-9

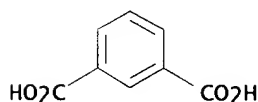
CMF C6 H10 O4



CM 7

CRN 121-91-5

CMF C8 H6 O4

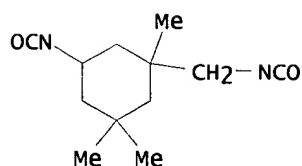


IT 4098-71-9DP, IPDI, block polymer with amine-terminated polysiloxane and amine-terminated polyethylene glycol 4767-03-7DP, Dimethylolpropionic acid, block polymer with amine-terminated polysiloxane and amine-terminated polyethylene glycol and IPDI 9016-00-6DP, Poly[oxy(dimethylsilylene)], amine-terminated, block polymer with IPDI and poly(oxyethylene)diamine 11071-12-8DP, N-Methyldipropylenetriamine, block polymer with amine-terminated polysiloxane and amine-terminated polyethylene glycol and IPDI 25322-69-4DP, Polypropylene glycol, amine-terminated, sulfopropylated, block polymer with amine-terminated polysiloxane and amine-terminated polyethylene glycol and IPDI 70939-81-0DP, block polymer with amine-terminated polysiloxane and IPDI 180005-72-5P, N-[3-(Dimethylamino)propyl]methacrylamide-N-vinylcaprolactam-N-vinyl-2-pyrrolidinone copolymer 292621-78-4P, IPDI-N-methyldipropylenetriamine-polyethylene glycol bis(2-aminopropyl ether) block copolymer 292621-82-0P, (3-Aminopropyl)methylsilanediol-dimethylsilanediol-IPDI-N-methyldipropylenetriamine-polyethylene glycol bis(2-aminopropyl ether) block graft copolymer 292621-85-3P, Butyl acrylate-N-[3-(dimethylamino)propyl]methacrylamide-N-vinyl-2-pyrrolidinone copolymer 292621-88-6P, Dimethylolpropionic acid-IPDI-polyethylene glycol bis(2-aminopropyl ether) block copolymer 292621-90-0P, tert-Butyl acrylate-N-[3-(dimethylamino)propyl]methacrylamide-methacrylic acid-N-vinyl-2-pyrrolidinone copolymer 292621-92-2P, Butyl acrylate-N-[3-(dimethylamino)propyl]methacrylamide-methacrylic acid copolymer 292621-94-4P, tert-Butyl acrylate-N-[3-(dimethylamino)propyl]methacrylamide-methacrylic acid copolymer

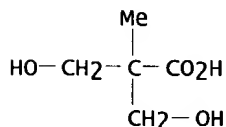
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation) (neutralizing polymer; polyureas and their water-sol. or water-dispersible polymer salts)

RN 4098-71-9 HCAPLUS

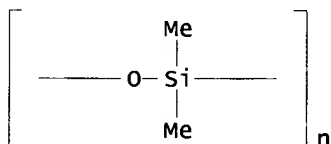
CN Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



RN 4767-03-7 HCAPLUS  
 CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (9CI) (CA INDEX NAME)



RN 9016-00-6 HCAPLUS  
 CN Poly[oxy(dimethylsilylene)] (8CI, 9CI) (CA INDEX NAME)

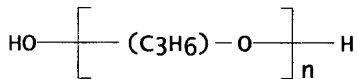


RN 11071-12-8 HCAPLUS  
 CN 1,2-Propanediamine, N-(2-aminomethylethyl)-, N-methyl deriv. (9CI) (CA INDEX NAME)

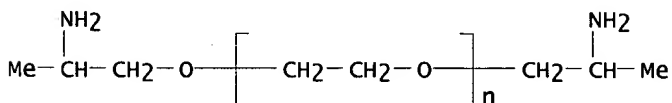


3 (D1-Me)

RN 25322-69-4 HCAPLUS  
 CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 70939-81-0 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-(2-aminopropyl)-.omega.-(2-aminopropoxy)- (9CI) (CA INDEX NAME)

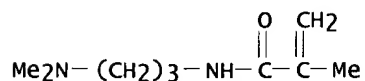


RN 180005-72-5 HCAPLUS  
 CN 2-Propenamide, N-[3-(dimethylamino)propyl]-2-methyl-, polymer with

1-ethenylhexahydro-2H-azepin-2-one and 1-ethenyl-2-pyrrolidinone (9CI)  
(CA INDEX NAME)

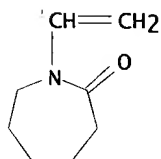
CM 1

CRN 5205-93-6  
CMF C9 H18 N2 O



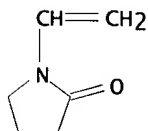
CM 2

CRN 2235-00-9  
CMF C8 H13 N O



CM 3

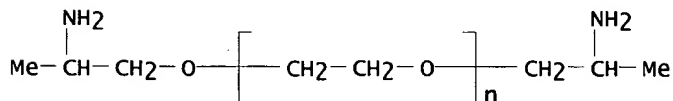
CRN 88-12-0  
CMF C6 H9 N O



RN 292621-78-4 HCAPLUS  
CN 1,2-Propanediamine, N-(2-aminomethylethyl)-, N-methyl deriv., polymer with  
.alpha.-(2-aminopropyl)-.omega.-(2-aminopropoxy)poly(oxy-1,2-ethanediyl)  
and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, block  
(9CI) (CA INDEX NAME)

CM 1

CRN 70939-81-0  
CMF (C2 H4 O)<sub>n</sub> C6 H16 N2 O  
CCI PMS



CM 2

CRN 11071-12-8  
CMF C7 H19 N3  
CCI IDS

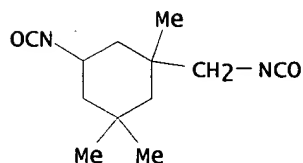
CDES \*



3 (D1-Me)

CM 3

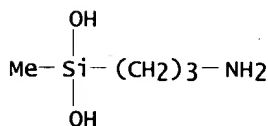
CRN 4098-71-9  
CMF C12 H18 N2 O2



RN 292621-82-0 HCAPLUS  
CN Silanediol, (3-aminopropyl)methyl-, polymer with N-(2-aminomethylethyl)-1,2-propanediamine N-methyl deriv., .alpha.-(2-aminopropyl)-.omega.-(2-aminopropoxy)poly(oxy-1,2-ethanediyl), dimethylsilanediol and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, block, graft (9CI) (CA INDEX NAME)

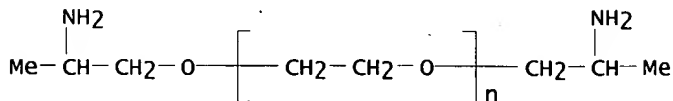
CM 1

CRN 158465-65-7  
CMF C4 H13 N O2 Si



CM 2

CRN 70939-81-0  
CMF (C2 H4 O)n C6 H16 N2 O  
CCI PMS



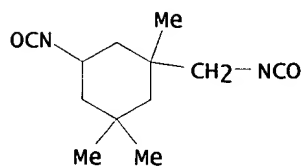
CM 3

CRN 11071-12-8  
CMF C7 H19 N3  
CCI IDS  
CDES \*

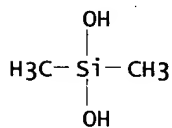


3 (D1-Me)

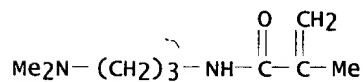
CM 4

 CRN 4098-71-9  
 CMF C12 H18 N2 O2


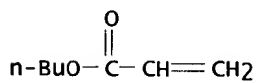
CM 5

 CRN 1066-42-8  
 CMF C2 H8 O2 Si

 RN 292621-85-3 HCAPLUS  
 CN 2-Propenoic acid, butyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

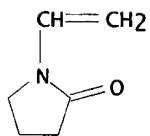
 CRN 5205-93-6  
 CMF C9 H18 N2 O


CM 2

 CRN 141-32-2  
 CMF C7 H12 O2


CM 3

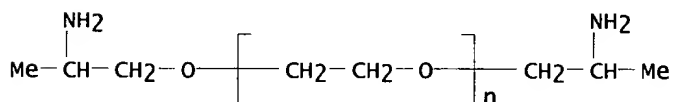
 CRN 88-12-0  
 CMF C6 H9 N O



RN 292621-88-6 HCAPLUS  
 CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with  
 .alpha.-(2-aminopropyl)-.omega.-(2-aminopropoxy)poly(oxy-1,2-ethanediyl)  
 and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, block  
 (9CI) (CA INDEX NAME)

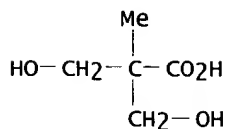
CM 1

CRN 70939-81-0  
 CMF (C2 H4 O)<sub>n</sub> C6 H16 N2 O  
 CCI PMS



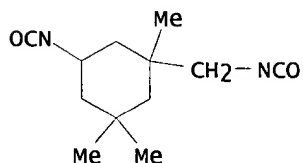
CM 2

CRN 4767-03-7  
 CMF C5 H10 O4



CM 3

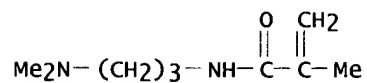
CRN 4098-71-9  
 CMF C12 H18 N2 O2



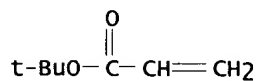
RN 292621-90-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with N-[3-(dimethylamino)propyl]-2-  
 methyl-2-propenamide, 1,1-dimethylethyl 2-propenoate and  
 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

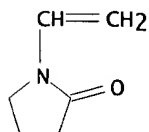
CRN 5205-93-6  
 CMF C9 H18 N2 O



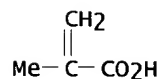
CM 2

CRN 1663-39-4  
CMF C7 H12 O2

CM 3

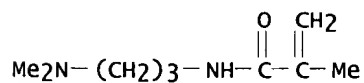
CRN 88-12-0  
CMF C6 H9 N O

CM 4

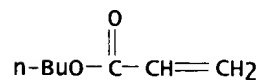
CRN 79-41-4  
CMF C4 H6 O2

RN 292621-92-2 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

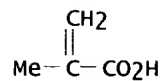
CM 1

CRN 5205-93-6  
CMF C9 H18 N2 O

CM 2

CRN 141-32-2  
CMF C7 H12 O2

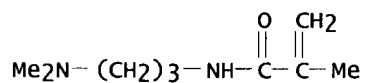
CM 3

CRN 79-41-4  
CMF C4 H6 O2

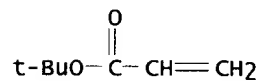
RN 292621-94-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and 1,1-dimethylethyl 2-propenoate (9CI) (CA INDEX NAME)

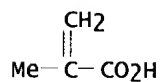
CM 1

CRN 5205-93-6  
CMF C9 H18 N2 O

CM 2

CRN 1663-39-4  
CMF C7 H12 O2

CM 3

CRN 79-41-4  
CMF C4 H6 O2



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L10 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:144926 HCAPLUS  
 DOCUMENT NUMBER: 132:194849  
 TITLE: Cationic polymers and their use in cosmetics, particularly hair preparations  
 INVENTOR(S): Nguyen Kim, Son; Sanner, Axel; Schehlmann, Volker  
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000011051	A1	20000302	WO 1999-EP6059	19990819
W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HR, HU, ID, IL, IN, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19838196	A1	20000302	DE 1998-19838196	19980824
AU 9958534	A1	20000314	AU 1999-58534	19990819
EP 1117711	A1	20010725	EP 1999-945994	19990819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: DE 1998-19838196 A 19980824  
 WO 1999-EP6059 W 19990819

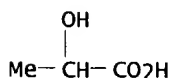
AB The cationic polymers are obtained by free-radical copolymn. of (a) CH<sub>2</sub>:CR<sub>1</sub>COXR<sub>2</sub> (I; R<sub>1</sub> = H, C1-8 alkyl; R<sub>2</sub> = C2-22 alkyl; X = O, NR<sub>1</sub>) 50-70, (b) N-vinyl-lactams having otherwise unsubstituted 5- to 7-membered rings 5-45, (c) monoethylenically unsatd. amines 5-40, and (d) a polyoxyalkylene-polysiloxane 0-5 wt.%. Of total monomers, 10-70 wt.% is represented by I with R<sub>2</sub> = tert-Bu. Thus, tert-Bu acrylate 612, [(dimethylamino)propyl]methacrylamide 120, and N-vinylpyrrolidone 468 g were polymd. with wako V 59 in EtOH at 80.degree., and the polymer was cooled to 40.degree. and treated with H<sub>3</sub>PO<sub>4</sub> to give a clear, light yellow soln. In a hair spray formulation it provided 75% curl retention.

IT 259795-55-6DP, reaction products with polyoxyalkylene-polysiloxanes 259795-56-7DP, reaction products with polyoxyalkylene-polysiloxanes  
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cationic polymers for use in cosmetics)

RN 259795-55-6 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl 2-propenoate and 1-ethenyl-2-pyrrolidinone, 2-hydroxypropanoate (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5  
 CMF C3 H6 O3

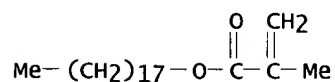


CM 2

CRN 259795-53-4  
 CMF (C22 H42 O2 . C9 H18 N2 O . C7 H12 O2 . C6 H9 N O)x  
 CCI PMS

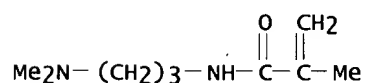
CM 3

CRN 32360-05-7  
 CMF C22 H42 O2



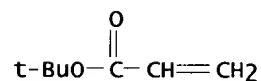
CM 4

CRN 5205-93-6  
 CMF C9 H18 N2 O



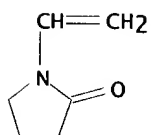
CM 5

CRN 1663-39-4  
 CMF C7 H12 O2



CM 6

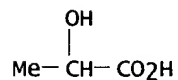
CRN 88-12-0  
 CMF C6 H9 N O



RN 259795-56-7 HCAPLUS  
 CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with  
 N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and  
 1-ethenyl-2-pyrrolidinone, 2-hydroxypropanoate (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5  
 CMF C3 H6 O3





CM 2

CRN 259795-47-6

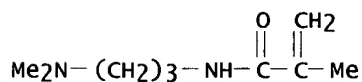
$$\text{CMF} \quad (\text{C}_9 \text{ H}_{18} \text{ N}_2 \text{ O} \cdot \text{C}_7 \text{ H}_{12} \text{ O}_2 \cdot \text{C}_6 \text{ H}_9 \text{ N O})_x$$

CCI PMS

CM 3

CRN 5205-93-6

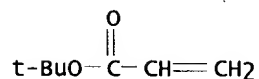
CMF C9 H18 N2 O



CM 4

CRN 1663-39-4

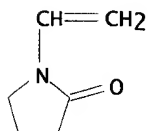
CMF C7 H12 O2



CM 5

CRN 88-12-0

CMF C6 H9 N O



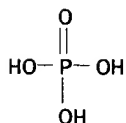
RN 259795-50-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl  
2-propenoate and 1-ethenyl-2-pyrrolidinone, phosphate (9CI) (CA INDEX  
NAME)

CM 1

CRN 7664-38-2

CMF H3 04 P



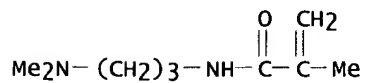
CM 2

CRN 259795-49-8

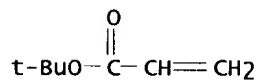
$$\text{CMF} \quad (\text{C}_9 \text{ H}_{18} \text{ N}_2 \text{ O} \cdot \text{C}_8 \text{ H}_{14} \text{ O}_2 \cdot \text{C}_7 \text{ H}_{12} \text{ O}_2 \cdot \text{C}_6 \text{ H}_9 \text{ N O})_x$$

CCI PMS

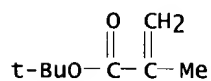
CM 3

CRN 5205-93-6  
CMF C9 H18 N2 O

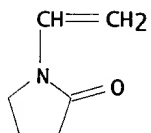
CM 4

CRN 1663-39-4  
CMF C7 H12 O2

CM 5

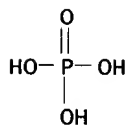
CRN 585-07-9  
CMF C8 H14 O2

CM 6

CRN 88-12-0  
CMF C6 H9 N O

RN 259795-52-3 HCAPLUS  
CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, N-(1,1-dimethylethyl)-  
2-propenamide and 1-ethenyl-2-pyrrolidinone, phosphate (9CI) (CA INDEX  
NAME)

CM 1

CRN 7664-38-2  
CMF H3 O4 P

CM 2

CRN 259795-51-2

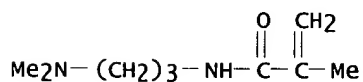
CMF (C9 H18 N2 O . C7 H13 N O . C7 H12 O2 . C6 H9 N O)x

CCI PMS

CM 3

CRN 5205-93-6

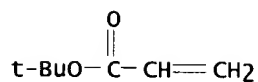
CMF C9 H18 N2 O



CM 4

CRN 1663-39-4

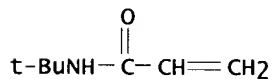
CMF C7 H12 O2



CM 5

CRN 107-58-4

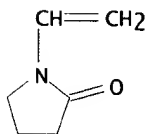
CMF C7 H13 N O



CM 6

CRN 88-12-0

CMF C6 H9 N O



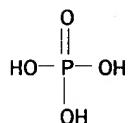
RN 259795-54-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl  
2-propenoate and 1-ethenyl-2-pyrrolidinone, phosphate (9CI) (CA INDEX  
NAME)

CM 1

CRN 7664-38-2

CMF H3 O4 P



CM 2

CRN 259795-53-4

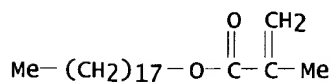
CMF (C22 H42 O2 . C9 H18 N2 O . C7 H12 O2 . C6 H9 N O)x

CCI PMS

CM 3

CRN 32360-05-7

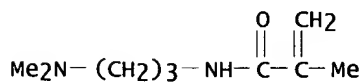
CMF C22 H42 O2



CM 4

CRN 5205-93-6

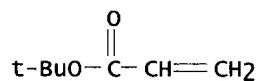
CMF C9 H18 N2 O



CM 5

CRN 1663-39-4

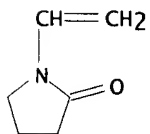
CMF C7 H12 O2



CM 6

CRN 88-12-0

CMF C6 H9 N O



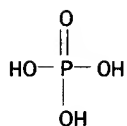
RN 259795-58-9 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and  
1-ethenylhexahydro-2H-azepin-2-one, phosphate (9CI) (CA INDEX NAME)

CM 1

CRN 7664-38-2

CMF H3 O4 P



CM 2

CRN 259795-57-8

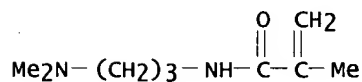
CMF (C9 H18 N2 O . C8 H13 N O . C7 H12 O2)x

CCI PMS

CM 3

CRN 5205-93-6

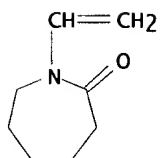
CMF C9 H18 N2 O



CM 4

CRN 2235-00-9

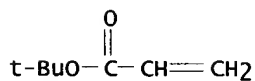
CMF C8 H13 N O



CM 5

CRN 1663-39-4

CMF C7 H12 O2



RN 259795-60-3 HCAPLUS

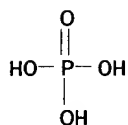
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with  
 N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, N-(1,1-dimethylethyl)-  
 2-propenamide and 1-ethenyl-2-pyrrolidinone, phosphate (9CI) (CA INDEX  
 NAME)

CM 1

CRN 7664-38-2

CMF H3 O4 P





CM 2

CRN 259795-59-0

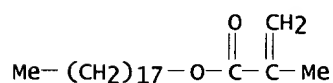
CMF (C22 H42 O2 . C9 H18 N2 O . C7 H13 N O . C6 H9 N O)x

CCI PMS

CM 3

CRN 32360-05-7

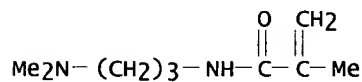
CMF C22 H42 O2



CM 4

CRN 5205-93-6

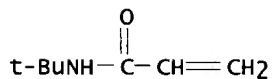
CMF C9 H18 N2 O



CM 5

CRN 107-58-4

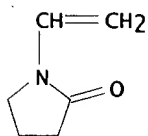
CMF C7 H13 N O



CM 6

CRN 88-12-0

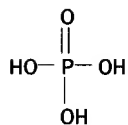
CMF C6 H9 N O



RN 259795-62-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with  
 N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, N-(1,1-dimethylethyl)-  
 2-propenamide and 1-ethenylhexahydro-2H-azepin-2-one, phosphate (9CI) (CA  
 INDEX NAME)

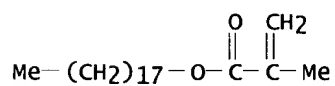
CM 1

CRN 7664-38-2  
CMF H3 O4 P

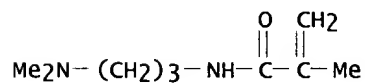
CM 2

CRN 259795-61-4  
CMF (C22 H42 O2 . C9 H18 N2 O . C8 H13 N O . C7 H13 N O)x  
CCI PMS

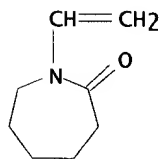
CM 3

CRN 32360-05-7  
CMF C22 H42 O2

CM 4

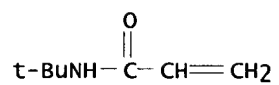
CRN 5205-93-6  
CMF C9 H18 N2 O

CM 5

CRN 2235-00-9  
CMF C8 H13 N O

CM 6

CRN 107-58-4  
CMF C7 H13 N O



REFERENCE COUNT:  
REFERENCE(S):

- 3  
(1) BASF; EP 0100890 A 1984, P2 HCAPLUS  
(2) BASF; EP 0373442 A 1990 HCAPLUS  
(3) ISP Investments Inc; WO 9619966 A 1996 HCAPLUS

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L10 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1999:330560 HCAPLUS  
 DOCUMENT NUMBER: 130:356891  
 TITLE: Propellant-free cosmetic pump hair  
 sprays and pump foams  
 INVENTOR(S): Schehlmann, Volker; Hoessel, Peter  
 PATENT ASSIGNEE(S): BASF A.-G., Germany  
 SOURCE: Ger. Offen., 14 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19750520	A1	19990520	DE 1997-19750520	19971114
WO 9925311	A1	19990527	WO 1998-EP7027	19981104
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1028700	A1	20000823	EP 1998-959839	19981104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
PRIORITY APPLN. INFO.: DE 1997-19750520 A 19971114				
WO 1998-EP7027 W 19981104				

AB Hair-conditioning and -setting preps. which are sprayable without use of a propellant are provided which contain .gtoreq.1 cationic and .gtoreq.1 anionic polymer in an aq., alc., or aq.-alc. solvent. Suitable cationic polymers include (quaternized) vinylpyrrolidone/dialkylaminoalkyl (meth)acrylates, quaternary ammonium group-contg. cellulose ethers, cationic polysaccharides, (crosslinked) polyamino-polyamides, reaction products of polyalkylenepolyamines with dicarboxylic acids, and ionene polymers. The anionic polymers may be carboxylated or sulfonated vinyl polymers, esp. (meth)acrylic acid homo- or copolymers. These polymer combinations are also useful in formulation of nonsticky leave-on hair-conditioning lotions or gels. Thus, a pump spray formulation contained Luvimer MAE 30D [methacrylic acid/Et acrylate (50:50) copolymer] 3.33, 2-amino-2-methyl-1-propanol 0.26, Polyquaternium 44 1.25, Cremophor A 25 0.50, Tego-Betaine L7 1.00, Cremophor RH 40 0.70, perfume oil 0.20, preservative 0.10, and H2O to 100.00 g.

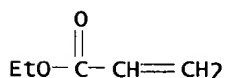
IT 25212-88-8, Methacrylic acid/ethyl acrylate copolymer  
 53633-54-8, Polyquaternium 11 65497-29-2  
 76050-42-5, Carbopol 940 81859-24-7, Polyquaternium 10  
 92183-41-0, Polyquaternium 4 95144-24-4, Polyquaternium  
 16 150599-70-5, Polyquaternium 44 159666-35-0  
 174761-16-1, Polyquaternium 46  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)

(propellant-free cosmetic pump hair sprays and pump  
 foams)

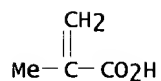
RN 25212-88-8 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate (9CI) (CA  
 INDEX NAME)

CM 1

CRN 140-88-5  
 CMF C5 H8 O2

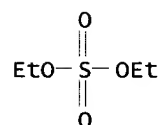


CM 2

CRN 79-41-4  
CMF C4 H6 O2

RN 53633-54-8 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

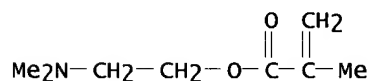
CM 1

CRN 64-67-5  
CMF C4 H10 O4 S

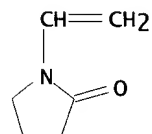
CM 2

CRN 30581-59-0  
CMF (C8 H15 N O2 . C6 H9 N O)x  
CCI PMS

CM 3

CRN 2867-47-2  
CMF C8 H15 N O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

RN 65497-29-2 HCAPLUS  
CN Guar gum, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride (9CI) (CA INDEX NAME)

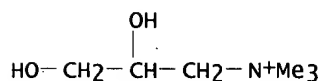
CM 1

CRN 67034-33-7

CMF C6 H16 N O2 . x Unspecified  
CDES 8:GD

CM 2

CRN 44814-66-6  
CMF C6 H16 N O2



CM 3

CRN 9000-30-0  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 76050-42-5 HCAPLUS  
CN Carbomer 940 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

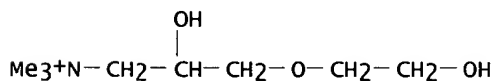
RN 81859-24-7 HCAPLUS  
CN Cellulose, 2-hydroxyethyl 2-[2-hydroxy-3-(trimethylammonio)propoxy]ethyl  
2-hydroxy-3-(trimethylammonio)propyl ether, chloride (9CI) (CA INDEX NAME)

CM 1

CRN 170553-71-6  
CMF C8 H20 N O3 . x C6 H16 N O2 . x C2 H6 O2 . x Unspecified  
CDES 8:GD

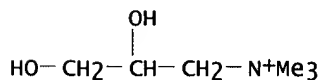
CM 2

CRN 170344-46-4  
CMF C8 H20 N O3



CM 3

CRN 44814-66-6  
CMF C6 H16 N O2



CM 4

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 5

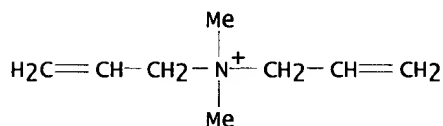
CRN 107-21-1  
CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-OH

RN 92183-41-0 HCAPLUS  
CN Cellulose, 2-hydroxyethyl ether, polymer with N,N-dimethyl-N-2-propenyl-2-propen-1-aminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8  
CMF C8 H16 N . Cl



● Cl<sup>-</sup>

CM 2

CRN 9004-62-0  
CMF C2 H6 O2 . x Unspecified  
CDES 8:GD

CM 3

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 4

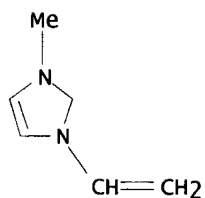
CRN 107-21-1  
CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-OH

RN 95144-24-4 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-methyl-, chloride, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 13474-25-4  
CMF C6 H9 N2 . Cl



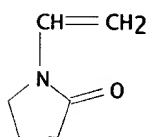
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\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 88-12-0

CMF C6 H9 N O



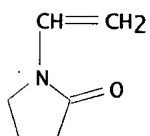
RN 150599-70-5 HCAPLUS

CN 1H-Imidazolium, 1-ethenyl-3-methyl-, methyl sulfate, polymer with  
1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0

CMF C6 H9 N O



CM 2

CRN 26591-72-0

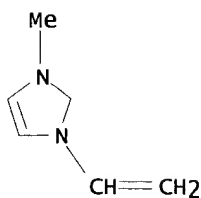
CMF C6 H9 N2 . C H3 O4 S

CM 3

CRN 45534-45-0

CMF C6 H9 N2





\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 4

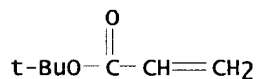
CRN 21228-90-0  
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 159666-35-0 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate and ethyl 2-propenoate (9CI) (CA INDEX NAME)

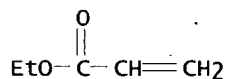
CM 1

CRN 1663-39-4  
CMF C7 H12 O2



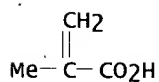
CM 2

CRN 140-88-5  
CMF C5 H8 O2



CM 3

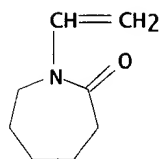
CRN 79-41-4  
CMF C4 H6 O2



RN 174761-16-1 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-methyl-, methyl sulfate, polymer with 1-ethenylhexahydro-2H-azepin-2-one and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

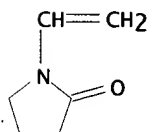
CM 1

CRN 2235-00-9  
CMF C8 H13 N O



CM 2

CRN 88-12-0  
CMF C6 H9 N O

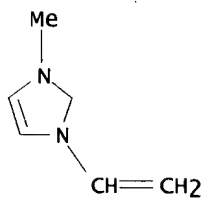


CM 3

CRN 26591-72-0  
CMF C6 H9 N2 . C H3 O4 S

CM 4

CRN 45534-45-0  
CMF C6 H9 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 5

CRN 21228-90-0  
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

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L10 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1999:265961 HCAPLUS  
 DOCUMENT NUMBER: 130:325498  
 TITLE: Use of cationic copolymers obtained from  
 unsaturated acids and N-vinylimidazolium salts in  
 cosmetic hair preparations  
 INVENTOR(S): Dieing, Reinhold; Hoessel, Peter; Sanner, Axel  
 PATENT ASSIGNEE(S): BASF A.-G., Germany  
 SOURCE: Ger. Offen., 8 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19745637	A1	19990422	DE 1997-19745637	19971016
EP 911018	A1	19990428	EP 1998-118850	19981006
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2248241	AA	19990416	CA 1998-2248241	19981008
CN 1220275	A	19990623	CN 1998-124133	19981016
PRIORITY APPLN. INFO.:			DE 1997-19745637	19971016

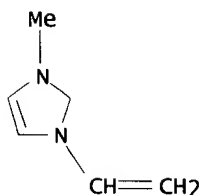
AB Cationic polymers obtained by radical polymn. of a  
 mixt. of (un)substituted N-vinylimidazole of specified structure 60-99,  
 ethylenically-unsatd. polymerizable acid or salt 1-40 and other monomer  
 0-30% (based on total monomers) and quaternization, are useful for the  
 title purpose. For example, methacrylic acid was neutralized in H<sub>2</sub>O with  
 aq. NaOH, combined with 3-methyl-1-vinylimidazolium chloride and the mixt.  
 polymd. under N in the presence of 2,2'-azobis(2-aminopropane)-HCl to give  
 a title copolymer which was used in a hair shampoo formulation.

IT 223720-51-2P, 3-Methyl-1-vinylimidazolium chloride-Sodium  
 methacrylate copolymer 223720-56-7P,  
 2-Acrylamido-2-methyl-1-propanesulfonic acid-3-Methyl-1-vinylimidazolium  
 chloride-Sodium methacrylate copolymer 223720-61-4P,  
 3-Methyl-1-vinylimidazolium methyl sulfate-Sodium methacrylate  
 copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (cationic copolymers obtained from unsatd. acids and  
 N-vinylimidazolium salts manufd. for use in cosmetic  
 hair prepns.)

RN 223720-51-2 HCAPLUS  
 CN 1H-Imidazolium, 1-ethenyl-3-methyl-, chloride, polymer with sodium  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 13474-25-4  
 CMF C6 H9 N2 . Cl

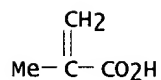
● Cl<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 5536-61-8

CMF C4 H6 O2 . Na



● Na

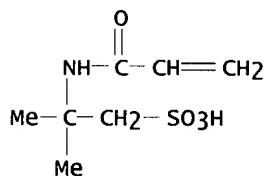
RN 223720-56-7 HCAPLUS

CN 1H-Imidazolium, 1-ethenyl-3-methyl-, chloride, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and sodium  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

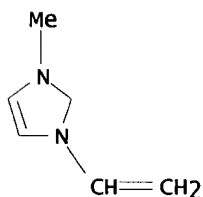
CMF C7 H13 N O4 S



CM 2

CRN 13474-25-4

CMF C6 H9 N2 . Cl

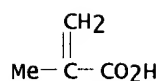
● Cl<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 3

CRN 5536-61-8

CMF C4 H6 O2 . Na

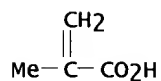


Na

RN 223720-61-4 HCAPLUS  
 CN 1H-Imidazolium, 1-ethenyl-3-methyl-, methyl sulfate, polymer with sodium  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5536-61-8  
 CMF C4 H6 O2 . Na



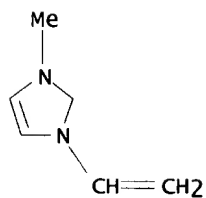
● Na

CM 2

CRN 26591-72-0  
 CMF C6 H9 N2 . C H3 O4 S

CM 3

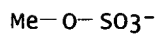
CRN 45534-45-0  
 CMF C6 H9 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 4

CRN 21228-90-0  
 CMF C H3 O4 S



=&gt; d ibib abs hitstr 5

L10 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:81688 HCAPLUS

DOCUMENT NUMBER: 130:129756

TITLE: Cross-linked cationic copolymers with  
N-vinylimidazolesINVENTOR(S): Zeitz, Katrin; Hoessel, Peter; Dieing, Reinhold;  
Sanner, Axel

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 6 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19731907	A1	19990128	DE 1997-19731907	19970724
EP 913143	A2	19990506	EP 1998-111949	19980629
EP 913143	A3	20000112		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

JP 11079954 A2 19990323 JP 1998-206334 19980722

PRIORITY APPLN. INFO.: DE 1997-19731907 19970724

AB Copolymers produced by radical polymn. of an N-vinylimidazole or quaternized N-vinylimidazole 1-99.99, a neutral or basic water-sol. monomer 0-98.99, an unsatd. acid or unsatd. anhydride 0-49.99, an addnl. monomer 0-50, and a bi- or polyfunctional monomer 0.01-10 wt.% and subsequent quaternization or protonation (in case a nonquaternized N-vinylimidazole was used) have excellent hair-conditioning and gel-forming properties and are useful as hair fixatives. Thus, a mixt. of H<sub>2</sub>O 560, vinylpyrrolidone 320, vinylimidazolium methosulfate 160, tripropylene glycol diacrylate 1.2, and 2,2'-azobis(2-amidinopropane)-2HCl was polymd. at 70.degree. under N<sub>2</sub> for 1 h. This copolymer (1.5% in H<sub>2</sub>O) formed a clear gel with a viscosity of 26,000 mPa s with very good fixative action and conferred good combability on the hair.

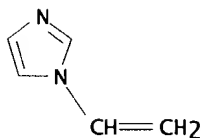
IT 1072-63-5D, N-vinylimidazole, quaternized, polymers  
219916-98-0

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(crosslinked cationic copolymers with N-vinylimidazoles)

RN 1072-63-5 HCAPLUS

CN 1H-Imidazole, 1-ethenyl- (9CI) (CA INDEX NAME)



RN 219916-98-0 HCAPLUS

CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester, polymer with 1-ethenyl-1H-imidazole mono(methyl sulfate) and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

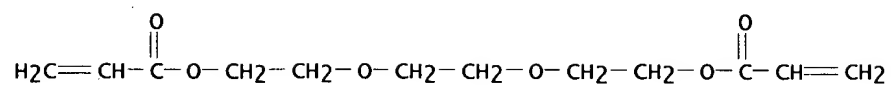
CM 1

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS

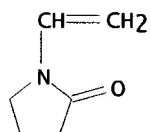
CDES \*



3 ( D1-Me )

CM 2

CRN 88-12-0  
CMF C6 H9 N O

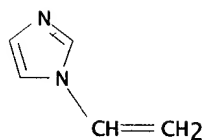


CM 3

CRN 161088-76-2  
CMF C5 H6 N2 . C H4 O4 S

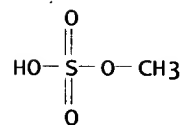
CM 4

CRN 1072-63-5  
CMF C5 H6 N2



CM 5

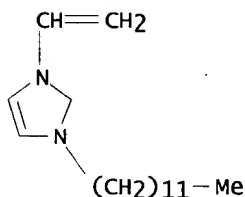
CRN 75-93-4  
CMF C H4 O4 S



=&gt; d ibib abs hitstr 6

L10 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1994:300191 HCAPLUS  
 DOCUMENT NUMBER: 120:300191  
 TITLE: Copolymers of unsaturated carboxylic acids and  
 quaternary ammonium compounds for use as thickeners  
 and dispersants  
 INVENTOR(S): Schade, Christian; Sanner, Axel; wekel, Hans  
 Ulrich; Frosch, Franz; westenfelder, Horst  
 PATENT ASSIGNEE(S): BASF A.-G., Germany  
 SOURCE: Ger. Offen., 10 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

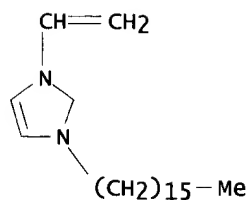
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4213971	A1	19931104	DE 1992-4213971	19920429
WO 9322358	A1	19931111	WO 1993-EP952	19930420
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 638098	A1	19950215	EP 1993-911483	19930420
EP 638098	B1	19960626		
R: DE, ES, FR, GB, IT				
JP 07505919	T2	19950629	JP 1993-518878	19930420
ES 2088283	T3	19960801	ES 1993-911483	19930420
PRIORITY APPLN. INFO.:				
			DE 1992-4213971	19920429
			WO 1993-EP952	19930420
AB	The title copolymers, esp. useful in cosmetics, are prepd. from 50-99.99% unsatd. C3-5 monocarboxylic and/or C4-8 dicarboxylic acids or anhydrides, 0.01-50% vinylimidazolium deriv. or (meth)acrylate deriv. contg. a quaternary ammonium group, and, optionally, other monomers such as (meth)acrylate esters and crosslinking monomers contg. .gtoreq.2 double bonds. A copolymer was prepd. from acrylic acid 200, N-dodecyl-N'-vinylimidazolium bromide 8.0, and pentaerythritol triallyl ether 1.2 g and used to prep. an aq. gel contg. triethanolamine (I) and an emulsion contg. I and paraffin oil.			
IT	155085-25-9P 155085-26-0P			
	RL: PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)			
	(prepn. and polymn. of)			
RN	155085-25-9 HCAPLUS			
CN	1H-Imidazolium, 1-dodecyl-3-ethenyl-, bromide (9CI) (CA INDEX NAME)			

● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

RN 155085-26-0 HCAPLUS  
 CN 1H-Imidazolium, 1-ethenyl-3-hexadecyl-, bromide (9CI) (CA INDEX NAME)



● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

IT 155085-28-2P 155085-29-3P 155085-30-6P  
 155085-32-8P 155085-34-0P 155085-36-2P  
 155085-37-3P 155085-38-4P 155085-40-8P  
 155085-41-9P 155085-42-0P 155085-43-1P  
 155085-44-2P 155085-45-3P 155085-46-4P  
 155085-47-5P 155085-48-6P

RL: PREP (Preparation)

(prepn. of, as thickeners and dispersants in cosmetics)

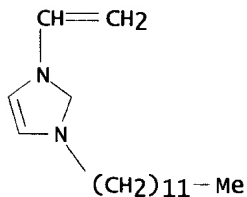
RN 155085-28-2 HCAPLUS

CN 1H-Imidazolium, 1-dodecyl-3-ethenyl-, bromide, polymer with 2-propenoic  
 acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI)  
 (CA INDEX NAME)

CM 1

CRN 155085-25-9

CMF C17 H31 N2 . Br

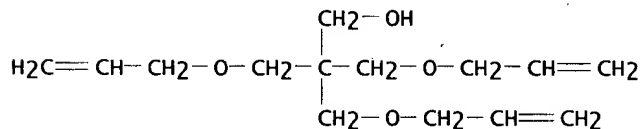
● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 1471-17-6

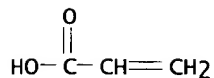
CMF C14 H24 O4



CM 3

CRN 79-10-7

CMF C3 H4 O2



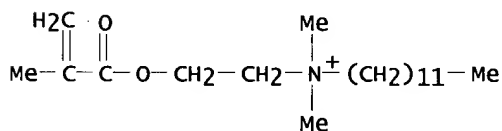
RN 155085-29-3 HCAPLUS

CN 1-Dodecanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 67453-27-4

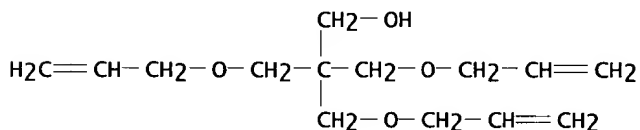
CMF C20 H40 N O2



CM 2

CRN 1471-17-6

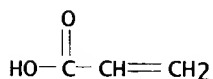
CMF C14 H24 O4



CM 3

CRN 79-10-7

CMF C3 H4 O2



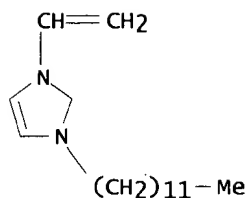
RN 155085-30-6 HCAPLUS

CN 1H-Imidazolium, 1-dodecyl-3-ethenyl-, bromide, polymer with octadecyl 2-methyl-2-propenoate, 2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 155085-25-9

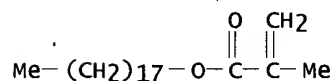
CMF C17 H31 N2 . Br

● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

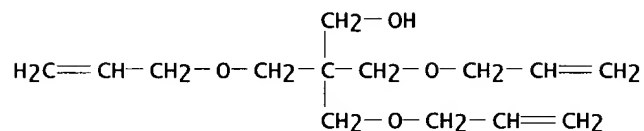
CM 2

CRN 32360-05-7  
CMF C22 H42 O2



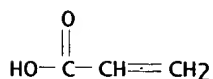
CM 3

CRN 1471-17-6  
CMF C14 H24 O4



CM 4

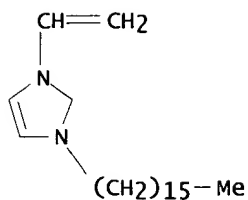
CRN 79-10-7  
CMF C3 H4 O2



RN 155085-32-8 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-hexadecyl-, bromide, polymer with 2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI)  
(CA INDEX NAME)

CM 1

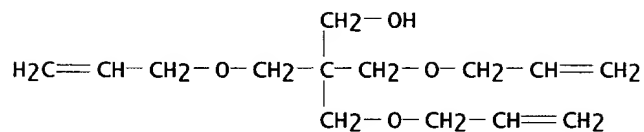
CRN 155085-26-0  
CMF C21 H39 N2 . Br

● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

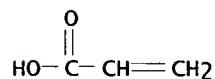
CM 2

CRN 1471-17-6  
CMF C14 H24 O4



CM 3

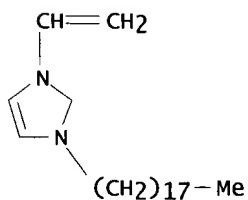
CRN 79-10-7  
CMF C3 H4 O2



RN 155085-34-0 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-octadecyl-, chloride, polymer with 2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI)  
(CA INDEX NAME)

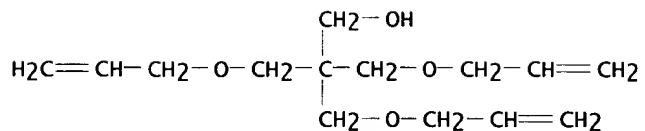
CM 1

CRN 113150-79-1  
CMF C23 H43 N2 . Cl

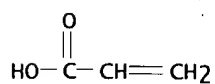
Cl<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

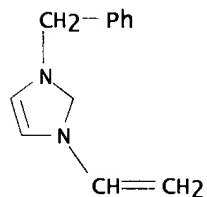
CRN 1471-17-6  
CMF C14 H24 O4

CM 3

CRN 79-10-7  
CMF C3 H4 O2

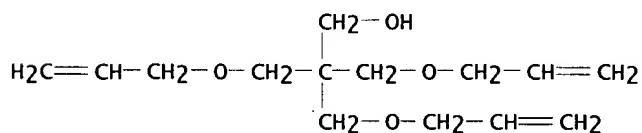
RN 155085-36-2 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-(phenylmethyl)-, chloride, polymer with  
2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-  
propanol (9CI) (CA INDEX NAME)

CM 1

CRN 70333-42-5  
CMF C12 H13 N2 . Cl● Cl<sup>-</sup>

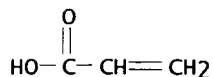
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 1471-17-6  
CMF C14 H24 O4

CM 3

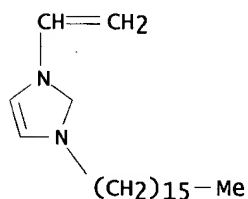
CRN 79-10-7  
CMF C3 H4 O2



RN 155085-37-3 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-hexadecyl-, bromide, polymer with octadecyl  
2-methyl-2-propenoate, 2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-  
propenyloxy)methyl]-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 155085-26-0  
CMF C21 H39 N2 . Br

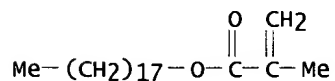


● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

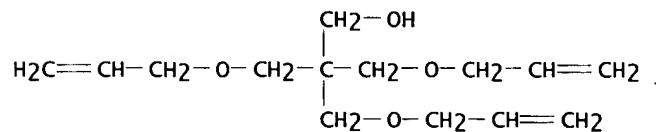
CM 2

CRN 32360-05-7  
CMF C22 H42 O2



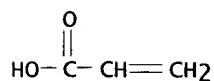
CM 3

CRN 1471-17-6  
CMF C14 H24 O4



CM 4

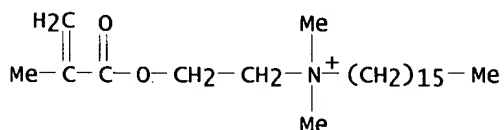
CRN 79-10-7  
CMF C3 H4 O2



RN 155085-38-4 HCAPLUS  
 CN 1-Hexadecanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, bromide, polymer with 2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI) (CA INDEX NAME)

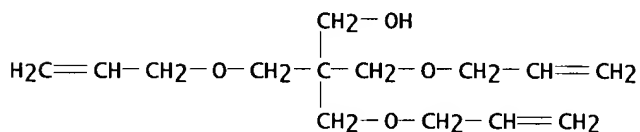
CM 1

CRN 149076-33-5  
 CMF C24 H48 N O2



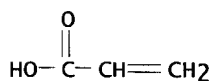
CM 2

CRN 1471-17-6  
 CMF C14 H24 O4



CM 3

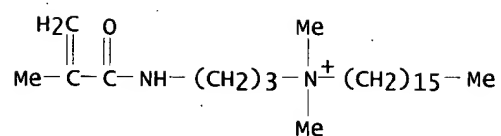
CRN 79-10-7  
 CMF C3 H4 O2



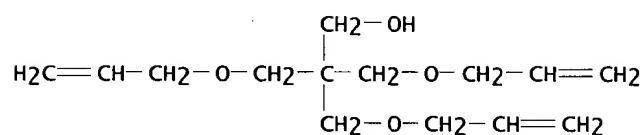
RN 155085-40-8 HCAPLUS  
 CN 1-Hexadecanaminium, N,N-dimethyl-N-[3-[(2-methyl-1-oxo-2-propenyl)amino]propyl]-, chloride, polymer with 2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI) (CA INDEX NAME)

CM 1

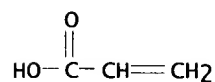
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● Cl<sup>-</sup>

CM 2

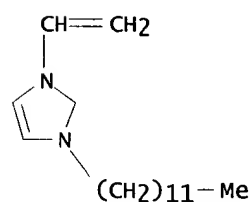
CRN 1471-17-6  
CMF C14 H24 O4

CM 3

CRN 79-10-7  
CMF C3 H4 O2

RN 155085-41-9 HCAPLUS  
CN 1H-Imidazolium, 1-dodecyl-3-ethenyl-, bromide, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

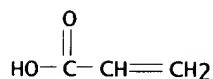
CRN 155085-25-9  
CMF C17 H31 N2 . Br● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 79-10-7  
CMF C3 H4 O2

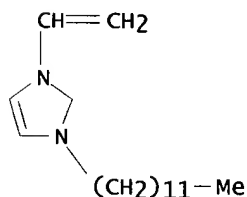




RN 155085-42-0 HCAPLUS  
 CN 1H-Imidazolium, 1-dodecyl-3-ethenyl-, bromide, polymer with  
 [R-(R\*,R\*)]-2,3-dihydroxy-N,N'-di-2-propenylbutanediamide and 2-propenoic  
 acid (9CI) (CA INDEX NAME)

CM 1

CRN 155085-25-9  
 CMF C17 H31 N2 . Br



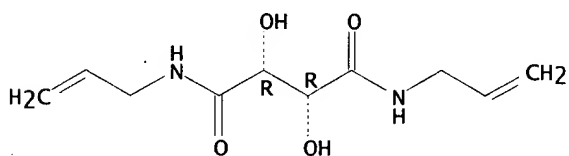
O Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

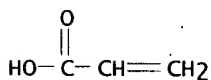
CRN 58477-85-3  
 CMF C10 H16 N2 O4

Absolute stereochemistry. Rotation (+).



CM 3

CRN 79-10-7  
 CMF C3 H4 O2

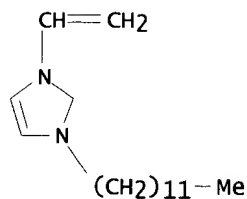


RN 155085-43-1 HCAPLUS  
 CN 1H-Imidazolium, 1-dodecyl-3-ethenyl-, bromide, polymer with  
 N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-3-sulfo-1-  
 propanaminium inner salt and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 155085-25-9

CMF C17 H31 N2 . Br

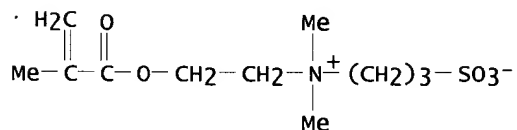
● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 3637-26-1

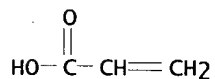
CMF C11 H21 N O5 S



CM 3

CRN 79-10-7

CMF C3 H4 O2



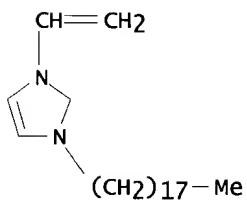
RN 155085-44-2 HCAPLUS

CN 1H-imidazolium, 1-ethenyl-3-octadecyl-, chloride, polymer with  
bis[(1-oxo-2-propenyl)amino]acetic acid and 2-propenoic acid (9CI) (CA  
INDEX NAME)

CM 1

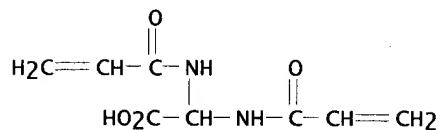
CRN 113150-79-1

CMF C23 H43 N2 . Cl

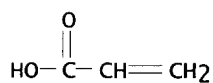
Cl<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 4387-85-3  
CMF C8 H10 N2 O4

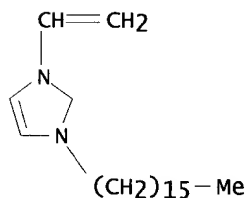
CM 3

CRN 79-10-7  
CMF C3 H4 O2

RN 155085-45-3 HCAPLUS

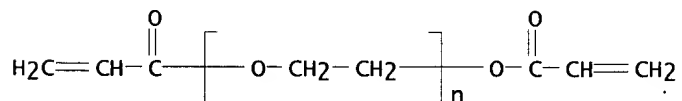
CN 1H-Imidazolium, 1-ethenyl-3-hexadecyl-, bromide, polymer with  
.alpha.-(1-oxo-2-propenyl)-.omega.-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

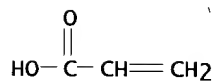
CRN 155085-26-0  
CMF C21 H39 N2 . Br● Br<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

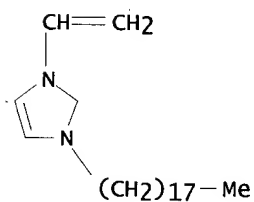
CRN 26570-48-9  
CMF (C2 H4 O)<sub>n</sub> C6 H6 O3  
CCI PMS

CM 3

CRN 79-10-7  
CMF C3 H4 O2

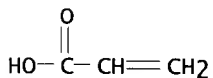
RN 155085-46-4 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-octadecyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 113150-79-1  
CMF C23 H43 N2 . Cl● Cl<sup>-</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

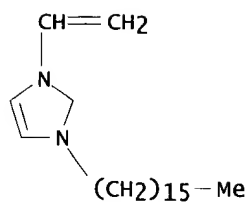
CM 2

CRN 79-10-7  
CMF C3 H4 O2

RN 155085-47-5 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-hexadecyl-, bromide, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

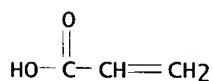
CM 1

CRN 155085-26-0  
CMF C21 H39 N2 . Br

● Br<sup>-</sup>

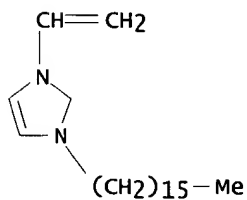
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 79-10-7  
CMF C3 H4 O2

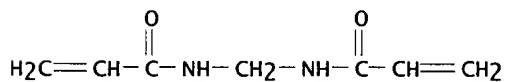
RN 155085-48-6 HCAPLUS  
CN 1H-Imidazolium, 1-ethenyl-3-hexadecyl-, bromide, polymer with  
N,N'-methylenebis[2-propenamide] and 2-propenoic acid (9CI) (CA INDEX  
NAME)

CM 1

CRN 155085-26-0  
CMF C21 H39 N2 . Br● Br<sup>-</sup>

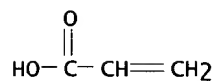
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

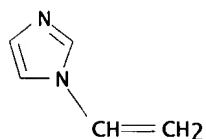
CRN 110-26-9  
CMF C7 H10 N2 O2

CM 3

CRN 79-10-7  
CMF C3 H4 O2



IT 1072-63-5, N-Vinylimidazole  
RL: RCT (Reactant)  
(reaction of, with alkyl bromides)  
RN 1072-63-5 HCAPLUS  
CN 1H-Imidazole, 1-ethenyl- (9CI) (CA INDEX NAME)



IT 112-82-3, 1-Bromohexadecane 143-15-7, 1-Bromododecane  
RL: RCT (Reactant)  
(reaction of, with vinylimidazole)  
RN 112-82-3 HCAPLUS  
CN Hexadecane, 1-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Me-(CH<sub>2</sub>)<sub>15</sub>-Br

RN 143-15-7 HCAPLUS  
CN Dodecane, 1-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Me-(CH<sub>2</sub>)<sub>11</sub>-Br

=&gt; d ibib abs hitstr 7

L10 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1984:157167 HCAPLUS

DOCUMENT NUMBER: 100:157167

TITLE: Copolymers and their use in hair conditioners

INVENTOR(S): Straub, Ferdinand; Sanner, Axel; Seib, Karl; Links, Wolfgang; Linke, Wolfgang

PATENT ASSIGNEE(S): BASF A.-G. , Fed. Rep. Ger.

SOURCE: Ger. Offen., 9 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3227334	A1	19840126	DE 1982-3227334	19820722
EP 100890	A2	19840222	EP 1983-106777	19830711
EP 100890	A3	19841031		
EP 100890	B1	19861008		

R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE

AT 22694 E 19861015 AT 1983-106777 19830711

PRIORITY APPLN. INFO.: DE 1982-3227334 19820722

EP 1983-106777 19830711

AB The title polymers are prepd. by the radical polymn. of C2-20-alkyl (meth)acrylates 20-75, neutral, N-contg., H2O-sol. monomers 5-20, cationic monomers 1-25, and C3-5 alkenoic acids 7-25%, and have Fikentscher K-value 15-75 (EtOH, 25.degree.). Thus, stirring 10% of a mixt. of vinylpyrrolidone 90, tert-Bu acrylate 160, methacrylic acid 26, vinylimidazole 28, and iso-PROH 300 parts with 10% of a mixt. of 45 parts tert-Bu perpivalate in 50 parts iso-PROH at reflux while adding the remaining solns. over 7 h gave a clear, yellowish, viscous copolymer [89643-86-7] soln. A 3% iso-PROH soln. could be mixed at 0.degree. with C3H8-C4H10 until turbidity appeared.

IT 89643-83-4 89643-84-5 89643-85-6

89643-86-7

RL: USES (Uses)

(for hair sprays)

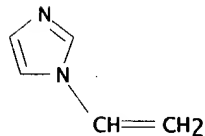
RN 89643-83-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-1H-imidazole, 1-ethenyl-2-pyrrolidinone and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 1072-63-5

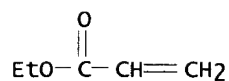
CMF C5 H6 N2



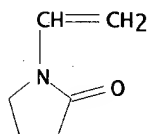
CM 2

CRN 140-88-5

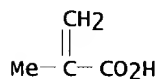
CMF C5 H8 O2



CM 3

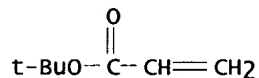
CRN 88-12-0  
CMF C6 H9 N O

CM 4

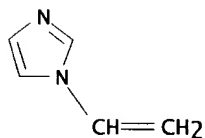
CRN 79-41-4  
CMF C4 H6 O2

RN 89643-84-5 HCAPLUS  
CN 2-Propenoic acid, polymer with 1,1-dimethylethyl 2-propenoate,  
1-ethenyl-1H-imidazole and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX  
NAME)

CM 1

CRN 1663-39-4  
CMF C7 H12 O2

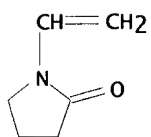
CM 2

CRN 1072-63-5  
CMF C5 H6 N2

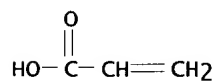
CM 3

CRN 88-12-0  
CMF C6 H9 N O



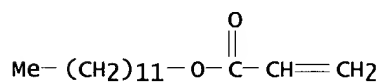


CM 4

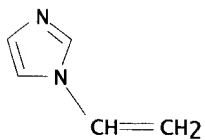
CRN 79-10-7  
CMF C3 H4 O2

RN 89643-85-6 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with dodecyl 2-propenoate,  
 1-ethenyl-1H-imidazole and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX  
 NAME)

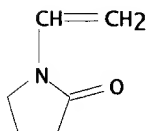
CM 1

CRN 2156-97-0  
CMF C15 H28 O2

CM 2

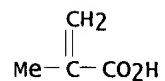
CRN 1072-63-5  
CMF C5 H6 N2

CM 3

CRN 88-12-0  
CMF C6 H9 N O

CM 4

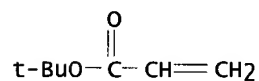
CRN 79-41-4  
CMF C4 H6 O2



RN 89643-86-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate, 1-ethenyl-1H-imidazole and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

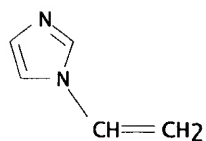
CM 1

CRN 1663-39-4  
CMF C7 H12 O2



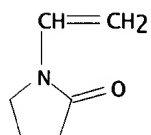
CM 2

CRN 1072-63-5  
CMF C5 H6 N2



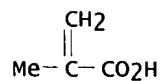
CM 3

CRN 88-12-0  
CMF C6 H9 N O



CM 4

CRN 79-41-4  
CMF C4 H6 O2



FUBARA 09/762,039

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L33 ANSWER 1 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2001:636116 HCAPLUS  
 DOCUMENT NUMBER: 135:200161  
 TITLE: Cosmetic compositions containing vinyl  
 copolymers with siloxanes  
 INVENTOR(S): Nguyen, Kim Son; Wood, Claudia  
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 50 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001062809	A1	20010830	WO 2001-EP2047	20010222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG DE 10008263 A1 20010830 DE 2000-10008263 20000223				

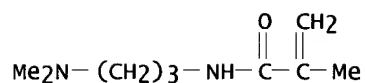
PRIORITY APPLN. INFO.: DE 2000-10008263 A 20000223

AB The invention relates to cosmetic formulations that contain at least one water-sol. or water-dispersible polymer contg. the following built-in components: (a) 5 to 50 wt. of at least one .alpha.,.beta.-ethylenically unsatd. monomer of general formula  $\text{CH}_2=\text{CR}_1\text{-CO-X}_1\text{-C}(\text{CH}_3)_3$ , where R1 represents hydrogen or C1- to C8-alkyl and X1 represents O or NR2, R2 representing hydrogen, C1- to C8-alkyl or C5- to C8-cycloalkyl, (b) 25 to 90 wt. of at least one N-vinyl amide and/or N-vinyl lactam, (c) 0.5 to 30 wt. of at least one compd. with a radically polymerizable, .alpha.,.beta.-ethylenically unsatd. double bond and at least one cationogenic and/or cationic group per mol., (d) 0 to 30 wt. of at least one .alpha.,.beta.-ethylenically unsatd. monomer of general formula  $\text{CH}_2=\text{CR}_3\text{-CO-X}_2\text{-R}_4$ , where R3 represents hydrogen or C1- to C8-alkyl, X2 represents O or NR5, R5 representing hydrogen, C1- to C8-alkyl or C5- to C8-cycloalkyl, and R4 represents hydrogen or a linear C1- to C22-alkyl radical; and to their salts. Thus copolymers were prepd. by soln. polymn. using the combination of the following monomers: tert. butylacrylate, butylacrylate, stearylacrylate, lauryl acrylate, methacrylic acid, N-vinylpyrrolidone, N-vinylformamide, N-[3-(dimethylamino)propyl]acrylamide, acrylamide, vinylimidazole; also in some compns. ethoxylated polysiloxane (Belsil DMC 6031) was added. The polymers were used in hair sprays, hair gels, creams, shampoos. A hair spray contained (wt./wt.): polymer prepd. as above 5.00; ethanol 55.00; propane/butane 39.96; perfume, additives q.s.

IT 259795-47-6P 259795-53-4P 292621-85-3P  
 356783-85-2P 356783-86-3P 356783-88-5P  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cosmetic compns. contg. vinyl copolymers with siloxanes)  
 RN 259795-47-6 HCAPLUS  
 CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

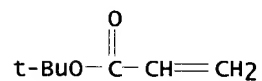
CRN 5205-93-6  
 CMF C9 H18 N2 O



CM 2

CRN 1663-39-4

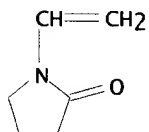
CMF C7 H12 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



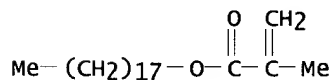
RN 259795-53-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl  
2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

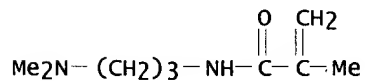
CMF C22 H42 O2



CM 2

CRN 5205-93-6

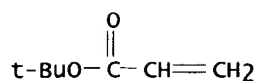
CMF C9 H18 N2 O



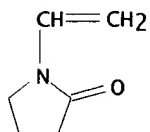
CM 3

CRN 1663-39-4

CMF C7 H12 O2

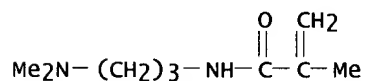


CM 4

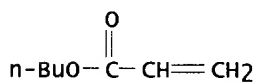
CRN 88-12-0  
CMF C6 H9 N O

RN 292621-85-3 HCAPLUS  
CN 2-Propenoic acid, butyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

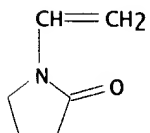
CM 1

CRN 5205-93-6  
CMF C9 H18 N2 O

CM 2

CRN 141-32-2  
CMF C7 H12 O2

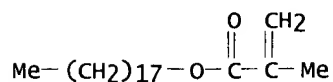
CM 3

CRN 88-12-0  
CMF C6 H9 N O

RN 356783-85-2 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

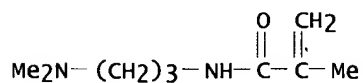
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



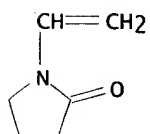
CM 2

CRN 5205-93-6  
CMF C9 H18 N2 O



CM 3

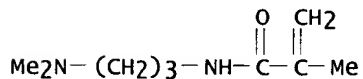
CRN 88-12-0  
CMF C6 H9 N O



RN 356783-86-3 HCAPLUS  
CN 2-Propenoic acid, butyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl 2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

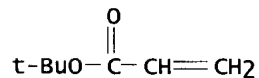
CM 1

CRN 5205-93-6  
CMF C9 H18 N2 O



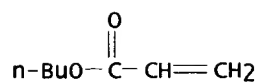
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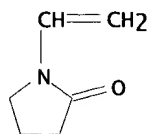


CM 3

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CMF C7 H12 O2

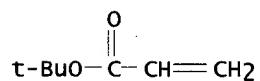


CM 4

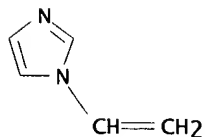
CRN 88-12-0  
CMF C6 H9 N O

RN 356783-88-5 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate,  
 1-ethenyl-1H-imidazole, 1-ethenyl-2-pyrrolidinone and 2-propenamide (9CI)  
 (CA INDEX NAME)

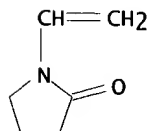
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CRN 1663-39-4  
CMF C7 H12 O2

CM 2

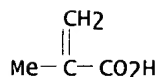
CRN 1072-63-5  
CMF C5 H6 N2

CM 3

CRN 88-12-0  
CMF C6 H9 N O

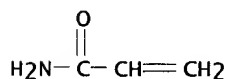
CM 4

CRN 79-41-4  
CMF C4 H6 O2



CM 5

CRN 79-06-1  
CMF C3 H5 N O



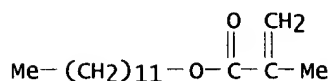
REFERENCE COUNT: 3  
REFERENCE(S):  
(1) Basf; DE 19838196 A 2000 HCAPLUS  
(2) Basf Ag; EP 0373442 A 1990 HCAPLUS  
(3) Isp Investment Inc; WO 9619966 A 1996 HCAPLUS

L33 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 2001:10587 HCAPLUS  
DOCUMENT NUMBER: 134:76119  
TITLE: Method for perming hair with a pretreatment  
with a composition containing at least an anionic  
polymer  
INVENTOR(S): N'guyen, Ly-lan; Sabbagh, Anne  
PATENT ASSIGNEE(S): L'oreal, Fr.  
SOURCE: Eur. Pat. Appl., 20 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

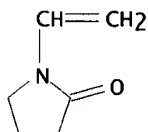
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1064921	A1	20010103	EP 2000-401595	20000606
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2795316	A1	20001229	FR 1999-8245	19990628
AU 733675	B2	20010524	AU 2000-39428	20000613
JP 2001031537	A2	20010206	JP 2000-193343	20000627
CN 1286976	A	20010314	CN 2000-118782	20000627
PRIORITY APPLN. INFO.: FR 1999-8245 A 19990628				
AB	A method of perming hair with successive application of a reducing compn. and a fixative comprising at least a cationic polymer is disclosed. The three following compns. were applied successively on the hair for obtaining a permanent hair wave: compn. (a) contg. Luvimer MAE 1%, monoethanolamine q.s. pH = 7, and water q.s. 100 g., compn. (b) contg. cysteine 3, spruce powder 5, monoethanolamine 2.2, fragrance 0.5, ethoxylated oleyl alc. 1, 40% sodium diethylenetriamine pentaacetate 0.4, hexadimethrine chloride 1.2, and water q.s. 90 g, compn. (c) contg. oxygen peroxide 8, Merquat-100 1, Rewoteric AMCAS 1, citric acid q.s. pH = 3, and water q.s. 100 g.			
IT	83120-95-0 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (method for perming hair with pretreatment with compn. contg. at least anionic polymer)			
RN	83120-95-0 HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)			



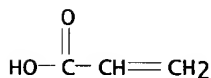
CM 1

CRN 142-90-5  
CMF C16 H30 O2

CM 2

CRN 88-12-0  
CMF C6 H9 N O

CM 3

CRN 79-10-7  
CMF C3 H4 O2REFERENCE COUNT:  
REFERENCE(S):

- 4  
 (1) Basf Ag; DE 19750520 A 1999 HCAPLUS  
 (2) Cauwet, D; US 4240450 A 1980 HCAPLUS  
 (3) Hoch, D; US 4660580 A 1987  
 (4) Oreal; FR 2739279 A 1997 HCAPLUS

L33 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:10586 HCAPLUS

DOCUMENT NUMBER: 134:76118

TITLE: Mascara comprising an aqueous dispersion of polyurethane and wax

INVENTOR(S): Collin, Nathalie

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1064920	A1	20010103	EP 2000-401663	20000613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2795634	A1	20010105	FR 1999-8411	19990630
WO 2001001936	A1	20010111	WO 2000-FR1713	20000621
W: BR, CA, CN, KR, MX				
JP 2001031539	A2	20010206	JP 2000-195090	20000628
PRIORITY APPLN. INFO.: FR 1999-8411 A 19990630				
AB Mascaras comprising cationic and anionic polymers and an aq. dispersion of polyurethane and wax are disclosed. A mascara contained				

carnauba wax 7, bees wax 6, hydrogenated jojoba oil 2, rice bran wax 7, candelilla wax 2.5, amino-2-methyl-2-propane-1,3-diol 0.2, triethanolamine 2.4, stearic acid 5.4, hydrosol. nonionic polymer 1.72, Avalure UR 450 (polyether-polyurethane) 1.9, sodium polymethacrylate 0.25, JR-400 0.1, pigments 6, preservatives and water q.s. 100 g.

IT 83120-95-0  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(mascara comprising aq. dispersion of polyurethane and wax)

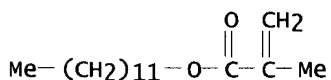
RN 83120-95-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 142-90-5

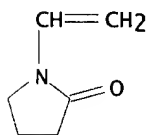
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CM 2

CRN 88-12-0

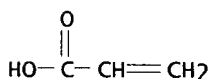
CMF C6 H9 N O



CM 3

CRN 79-10-7

CMF C3 H4 O2



REFERENCE COUNT: 8

REFERENCE(S):

- (1) Fowler, T; US 5753245 A 1998 HCAPLUS
- (2) Mondet, J; US 5753215 A 1998 HCAPLUS
- (3) Oreal; FR 2528699 A 1983 HCAPLUS
- (4) Oreal; EP 0637600 A 1995 HCAPLUS
- (5) Oreal; FR 2739288 A 1997 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:10585 HCAPLUS

DOCUMENT NUMBER: 134:76117

TITLE: Mascaras comprising film-forming polymers

INVENTOR(S): Bodelin, Sophie

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1064919	A1	20010103	EP 2000-401662	20000613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2795635	A1	20010105	FR 1999-8412	19990630
WO 2001001935	A1	20010111	WO 2000-FR1697	20000620
W: BR, CA, CN, KR, MX				
BR 2000006902	A	20010612	BR 2000-6902	20000620
JP 2001055310	A2	20010227	JP 2000-196939	20000629
PRIORITY APPLN. INFO.:			FR 1999-8412	A 19990630
			WO 2000-FR1697	W 20000620

AB Mascaras comprising cationic and anionic polymers and a dispersion of nonionic film-forming polymers, e.g. C1-6 alkyl acrylate polymers are disclosed. A mascara contained carnauba wax 7, bees wax 8, rice bran wax 7, candelilla wax 2.5, 2-amino-2-methylpropane-1,3-diol 0.2, triethanolamine 2.4, stearic acid 5.4, hydrosol: nonionic polymer 1.72, Et acrylate-Me methacrylate copolymer 0.75, dimethicone copolyol 0.2, sodium polymethacrylate 0.25, JR-400 0.1, pigments 6, preservatives and water q.s. 100 g.

IT 83120-95-0  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (mascaras comprising film-forming polymers)

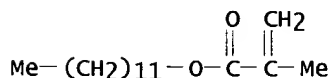
RN 83120-95-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 142-90-5

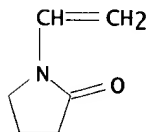
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CM 2

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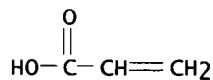
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CM 3

CRN 79-10-7

CMF C3 H4 O2



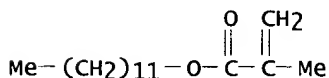
REFERENCE COUNT: 2

REFERENCE(S): (1) Franjac, D; US 5534247 A 1996 HCAPLUS

(2) wella Ag; WO 9534271 A 1995 HCAPLUS

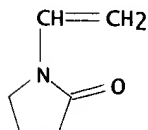
L33 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:608367 HCAPLUS  
 DOCUMENT NUMBER: 133:198393  
 TITLE: Mascara composition containing wax, film-forming polymer and silicone  
 INVENTOR(S): Piot, Bertrand; Bodelin, Sophie  
 PATENT ASSIGNEE(S): L'oreal, Fr.  
 SOURCE: Eur. Pat. Appl., 26 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1031342	A1	20000830	EP 2000-400062	20000112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2789894	A1	20000825	FR 1999-2301	19990224
FR 2789894	B1	20010420		
JP 2000247840	A2	20000912	JP 2000-28353	20000204
BR 2000000507	A	20010502	BR 2000-507	20000214
CN 1267508	A	20000927	CN 2000-102629	20000223
PRIORITY APPLN. INFO.: FR 1999-2301 A 19990224				
AB	A cosmetic compn. for coating of keratinic fibers comprises a hydrogenated vegetable oil, a film-forming polymer, and a polyoxyalkylene silicone. A mascara contained carnauba wax 14.7, beeswax 8.1, hydrogenated cotton oil 0.2, hydrogenated jojoba oil 0.2, 2-amino-methyl-2-propane-1,3-diol 0.2, triethanolamine 2.4, stearic acid 5.4, nonionic polymers 1.72, dimethicone copolyol 0.2, sodium polymethacrylate 0.25, crosslinked hydroxyethyl cellulose 0.1, pigments 6, preservatives and water q.s. 100.			
IT	83120-95-0 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (mascara compn. contg. wax, film-forming polymer and silicone)			
RN	83120-95-0 HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)			
CM	1			
CRN	142-90-5			
CMF	C16 H30 O2			

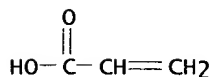


CM 2

CRN 88-12-0  
 CMF C6 H9 N O



CM 3

CRN 79-10-7  
CMF C3 H4 02REFERENCE COUNT:  
REFERENCE(S):

- 4  
 (1) L'Oreal; FR 2528699 A 1983 HCAPLUS  
 (2) L'Oreal; EP 0655234 A 1995 HCAPLUS  
 (3) L'Oreal; EP 0832637 A 1998 HCAPLUS  
 (4) The Procter & Gamble Company; WO 9636323 A 1996 HCAPLUS

L33 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:199289 HCAPLUS

DOCUMENT NUMBER: 132:241663

TITLE: Oil-in-alcohol-type hair-styling compositions containing polyether-silicone emulsifiers and cationic polymers

INVENTOR(S): Ohmura, Takayuki; Nanba, Tomiyuki

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

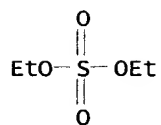
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2000086466	A2	20000328	JP 1998-270591	19980908
AB	The compns. contain oils, lower alcs., H <sub>2</sub> O, polyether-silicone emulsifiers ASiR20(SiR20)m(SiRB10)nSiR2A (I; A = Me, Ph, B1; B1 = C <sub>3</sub> H <sub>6</sub> O(C <sub>2</sub> H <sub>4</sub> O)a(C <sub>3</sub> H <sub>6</sub> O)bR'; R' = H, acyl, C1-4 alkyl; a, b = 5-50; R = Me, Ph; m = 50-1000; n = 0-40), and cationic polymers prep'd. by modification of copolymers from CH <sub>2</sub> :CR1COXR2NR3R4 (R1 = H, Me; R2 = C1-4 alkylene; R3, R4 = C1-4 alkyl; X = O, NH) 50-90, CH <sub>2</sub> :CR5CO2R6 (R5 = H, Me; R6 = C12-24 alkyl) 10-50, and other monomers 0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C1-4 alkyl sulfate residue; E = C1-12 alkyl, benzyl, C1-3 fatty acid C1-4 alkyl ester residue). A hair cream contg. dimethylpolysiloxane 2.0, liq. isoparaffin 30.0, isoparaffin soln. contg. 50% I [A, R = Me, B1 = (CH <sub>2</sub> ) <sub>3</sub> O(C <sub>2</sub> H <sub>4</sub> O)a(C <sub>3</sub> H <sub>6</sub> O)b, R' = H, m = 400, n = 10, a = b = 24] 20.0, EtOH 37.4, dimethylaminoethyl methacrylate-stearyl acrylate-tridecyl methacrylate copolymer comp'd. with BuCl 3.0, perfume, paraben, antioxidant, and H <sub>2</sub> O to 100 wt.% was not sticky and showed good hair-styling and -smoothing effects.				
IT	261949-40-0P RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses) (oil-in-alc. hair-styling compns. contg. polyoxyalkylene-siloxane emulsifiers and cationized polymers)				
RN	261949-40-0 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, comp'd. with diethyl sulfate (9CI) (CA INDEX NAME)				

CM 1

CRN 64-67-5  
CMF C4 H10 04 S



CM 2

CRN 182241-14-1

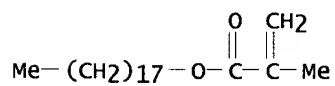
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CCI PMS

CM 3

CRN 32360-05-7

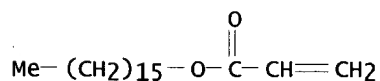
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CM 4

CRN 13402-02-3

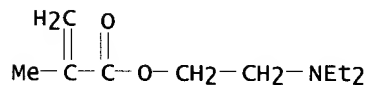
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CM 5

CRN 105-16-8

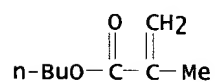
CMF C10 H19 N O2



CM 6

CRN 97-88-1

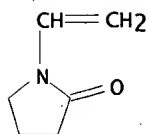
CMF C8 H14 O2



CM 7

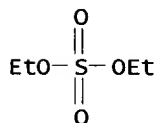
CRN 88-12-0

CMF C6 H9 N O



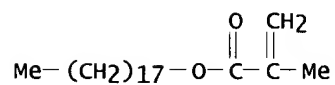
L33 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:199288 HCAPLUS  
 DOCUMENT NUMBER: 132:241662  
 TITLE: Hair-styling preparations containing  
 cationic polymers and Plant extracts  
 INVENTOR(S): Ohmura, Takayuki; Nanba, Tomiyuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2000086461	A2	20000328	JP 1998-280546	19980916
AB	Hair cosmetics contain (A) cationic polymers prepd. by modification of copolymers from CH <sub>2</sub> :CR <sub>1</sub> COXR <sub>2</sub> NR <sub>3</sub> R <sub>4</sub> (R <sub>1</sub> = H, Me; R <sub>2</sub> = C1-4 alkylene; R <sub>3</sub> , R <sub>4</sub> = C1-4 alkyl; X = O, NH) 50-90, CH <sub>2</sub> :CR <sub>5</sub> CO <sub>2</sub> R <sub>6</sub> (R <sub>5</sub> = H, Me; R <sub>6</sub> = C12-24 alkyl) 10-50, and other monomers 0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C1-4 alkyl sulfate residue; E = C1-12 alkyl, benzyl, C1-3 fatty acid C1-4 alkyl ester residue) and (B) plant exts. A hair prepn. contg. decamethylcyclopentasiloxane 15.0, dimethylpolysiloxane 3.0, 1,3-butylene glycol 2.0, polyoxyethylene hydrogenated castor oil 2.0, dimethylaminoethyl methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate copolymer compd. with Et <sub>2</sub> SO <sub>4</sub> 1.0, ginkgo ext. 1.0, Phellodendron amurense ext. 1.0, EtOH 15.0, perfume, and H <sub>2</sub> O to 100 wt.% showed hair-smoothing and -styling effects.				
IT	261949-40-0P RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair-smoothing and -styling preps. contg. cationized polymers and plant exts.)				
RN	261949-40-0 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, compd. with diethyl sulfate (9CI) (CA INDEX NAME)				
CM	1				
CRN	64-67-5				
CMF	C4 H10 O4 S				

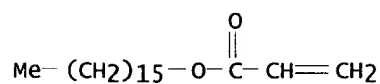


CM 2  
 CRN 182241-14-1  
 CMF (C22 H42 O2 . C19 H36 O2 . C10 H19 N O2 . C8 H14 O2 . C6 H9 N O)x  
 CCI PMS

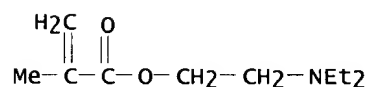
CM 3

CRN 32360-05-7  
CMF C22 H42 O2

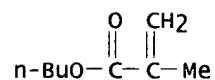
CM 4

CRN 13402-02-3  
CMF C19 H36 O2

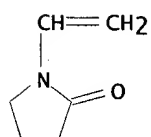
CM 5

CRN 105-16-8  
CMF C10 H19 N O2

CM 6

CRN 97-88-1  
CMF C8 H14 O2

CM 7

CRN 88-12-0  
CMF C6 H9 N O

L33 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:197955 HCAPLUS  
 DOCUMENT NUMBER: 132:241659  
 TITLE: Hair-styling compositions containing  
 cationic polymers



INVENTOR(S): Ohmura, Takayuki; Nanba, Tomiyuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2000086468	A2	20000328	JP 1998-270593	19980908

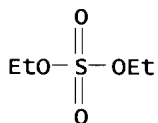
AB The compns. contain (A) cationic polymers prepd. by modification of copolymers from CH<sub>2</sub>:CR<sub>1</sub>COXR<sub>2</sub>NR<sub>3</sub>R<sub>4</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub> = C1-4 alkylene; R<sub>3</sub>, R<sub>4</sub> = C1-4 alkyl; X = O, NH) 50-90, CH<sub>2</sub>:CR<sub>5</sub>CO<sub>2</sub>R<sub>6</sub> (R<sub>5</sub> = H, Me; R<sub>6</sub> = C12-24 alkyl) 10-50, and other monomers 0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C1-4 alkyl sulfate residue; E = C1-12 alkyl, benzyl, C1-3 fatty acid C1-4 alkyl ester residue) and (B) 7:3 to 3:7 vinylpyrrolidone-vinyl acetate copolymer (I). A hair prepn. contg. decamethylcyclopentasiloxane 15.0, dimethylpolysiloxane 3.0, 1,3-butylene glycol 2.0, polyoxyethylene hydrogenated castor oil 2.0, dimethylaminoethyl methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate copolymer compd. with Et<sub>2</sub>SO<sub>4</sub> 5.0, I 3.0, EtOH 15.0, perfume, and H<sub>2</sub>O to 100 wt.% was not sticky and showed good hair-styling and -smoothing effects.

IT 261949-40-0P  
 RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (hair-smoothing and -styling preps. contg. cationized polymers and vinylpyrrolidone-vinyl acetate copolymer)

RN 261949-40-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5  
 CMF C4 H10 O4 S

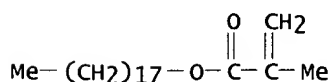


CM 2

CRN 182241-14-1  
 CMF (C<sub>22</sub> H<sub>42</sub> O<sub>2</sub> . C<sub>19</sub> H<sub>36</sub> O<sub>2</sub> . C<sub>10</sub> H<sub>19</sub> N O<sub>2</sub> . C<sub>8</sub> H<sub>14</sub> O<sub>2</sub> . C<sub>6</sub> H<sub>9</sub> N O)<sub>x</sub>  
 CCI PMS

CM 3

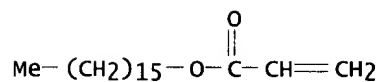
CRN 32360-05-7  
 CMF C<sub>22</sub> H<sub>42</sub> O<sub>2</sub>



CM 4

CRN 13402-02-3

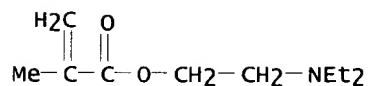
CMF C19 H36 O2



CM 5

CRN 105-16-8

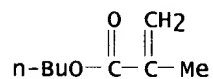
CMF C10 H19 N O2



CM 6

CRN 97-88-1

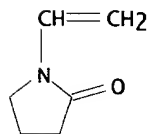
CMF C8 H14 O2



CM 7

CRN 88-12-0

CMF C6 H9 N O



L33 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:197954 HCAPLUS

DOCUMENT NUMBER: 132:241658

TITLE: Hair-styling compositions containing cationic polymers

INVENTOR(S): Ohmura, Takayuki; Nanba, Tomiyuki

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000086467	A2	20000328	JP 1998-270592	19980908

AB The comps. contain (A) cationic polymers prepd. by

modification of copolymers from CH<sub>2</sub>:CR<sub>1</sub>COXR<sub>2</sub>NR<sub>3</sub>R<sub>4</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub> = C<sub>1</sub>-4 alkylene; R<sub>3</sub>, R<sub>4</sub> = C<sub>1</sub>-4 alkyl; X = O, NH) 50-90, CH<sub>2</sub>:CR<sub>5</sub>CO<sub>2</sub>R<sub>6</sub> (R<sub>5</sub> = H, Me; R<sub>6</sub> = C<sub>12</sub>-24 alkyl) 10-50, and other monomers 0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C<sub>1</sub>-4 alkyl sulfate residue; E = C<sub>1</sub>-12 alkyl, benzyl, C<sub>1</sub>-3 fatty acid C<sub>1</sub>-4 alkyl ester residue) and (B) vinylpyrrolidone-N,N-dimethylaminoethyl methacrylate copolymer di-Et sulfate salt (I) (vinylpyrrolidone units/quaternized N,N-dimethylaminoethyl methacrylate units = 2/8 to 8/2). A hair prepn. contg. decamethylcyclopentasiloxane 15.0, dimethylpolysiloxane 3.0, 1,3-butylene glycol 2.0, polyoxyethylene hydrogenated castor oil 2.0, dimethylaminoethyl methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate copolymer compd. with Et<sub>2</sub>SO<sub>4</sub> 5.0, I 7.0, EtOH 15.0, perfume, and H<sub>2</sub>O to 100 wt.% was not sticky and showed good hair-styling and -smoothing effects.

IT 261949-40-0P

RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(hair-smoothing and -styling preps. contg. cationized acrylic polymers)

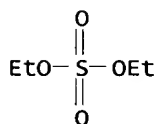
RN 261949-40-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5

CMF C4 H10 O4 S



CM 2

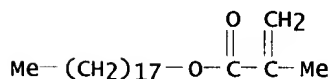
CRN 182241-14-1

CMF (C<sub>22</sub> H<sub>42</sub> O<sub>2</sub> . C<sub>19</sub> H<sub>36</sub> O<sub>2</sub> . C<sub>10</sub> H<sub>19</sub> N O<sub>2</sub> . C<sub>8</sub> H<sub>14</sub> O<sub>2</sub> . C<sub>6</sub> H<sub>9</sub> N O)<sub>x</sub>

CCI PMS

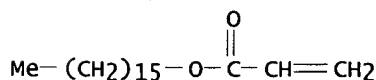
CM 3

CRN 32360-05-7

CMF C<sub>22</sub> H<sub>42</sub> O<sub>2</sub>

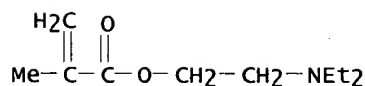
CM 4

CRN 13402-02-3

CMF C<sub>19</sub> H<sub>36</sub> O<sub>2</sub>

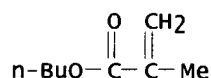
CM 5

CRN 105-16-8  
CMF C10 H19 N O2



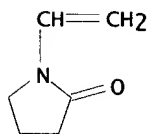
CM 6

CRN 97-88-1  
CMF C8 H14 O2



CM 7

CRN 88-12-0  
CMF C6 H9 N O



L33 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 2000:197952 HCAPLUS  
DOCUMENT NUMBER: 132:241657  
TITLE: Hair-smoothing and -styling preparations  
containing cationic polymers and keratin  
degradation products  
INVENTOR(S): Omura, Takayuki; Nanba, Tomiyuki  
PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000086464	A2	20000328	JP 1998-280549	19980916

AB Hair cosmetics contain (A) cationic polymers  
prepd. by modification of copolymers from CH<sub>2</sub>:CR<sub>1</sub>COXR<sub>2</sub>NR<sub>3</sub>R<sub>4</sub> (R<sub>1</sub>  
= H, Me; R<sub>2</sub> = C1-4 alkylene; R<sub>3</sub>, R<sub>4</sub> = C1-4 alkyl; X = O, NH) 50-90,  
CH<sub>2</sub>:CR<sub>5</sub>CO<sub>2</sub>R<sub>6</sub> (R<sub>5</sub> = H, Me; R<sub>6</sub> = C12-24 alkyl) 10-50, and other monomers  
0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C1-4  
alkyl sulfate residue; E = C1-12 alkyl, benzyl, C1-3 fatty acid C1-4 alkyl  
ester residue) and (B) keratin hydrolyzates, alkali salts of oxidized  
keratins, and/or alkali salts of thiol derivs. of reduced keratins. A  
hair prepn. contg. decamethylcyclopentasiloxane 15.0,  
.alpha.-keratose from wool fibers 1.0, keratin-S-(2-acrylamido-2-  
methylpropanesulfonic acid) deriv. 1.0, 1,3-butylene glycol 2.0,  
polyoxyethylene hydrogenated castor oil 2.0, dimethylaminoethyl  
methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate

copolymer compd. with Et<sub>2</sub>SO<sub>4</sub> 1.0, EtOH 15.0, perfume, and H<sub>2</sub>O to 100 wt.% showed hair-smoothing, -styling, and -conditioning effects.

IT 261949-40-0P

RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(hair-smoothing and -styling preps. contg.

cationized polymers and keratin degrdn. products (derivs.))

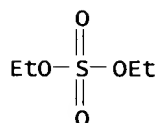
RN 261949-40-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone,  
hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, compd. with  
diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5

CMF C4 H10 O4 S



CM 2

CRN 182241-14-1

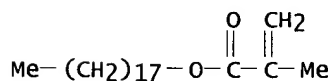
CMF (C<sub>22</sub> H<sub>42</sub> O<sub>2</sub> . C<sub>19</sub> H<sub>36</sub> O<sub>2</sub> . C<sub>10</sub> H<sub>19</sub> N O<sub>2</sub> . C<sub>8</sub> H<sub>14</sub> O<sub>2</sub> . C<sub>6</sub> H<sub>9</sub> N O)<sub>x</sub>

CCI PMS

CM 3

CRN 32360-05-7

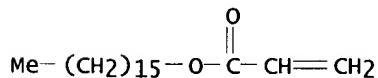
CMF C<sub>22</sub> H<sub>42</sub> O<sub>2</sub>



CM 4

CRN 13402-02-3

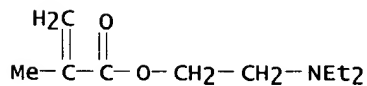
CMF C<sub>19</sub> H<sub>36</sub> O<sub>2</sub>



CM 5

CRN 105-16-8

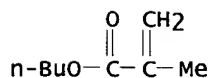
CMF C<sub>10</sub> H<sub>19</sub> N O<sub>2</sub>



CM 6

CRN 97-88-1

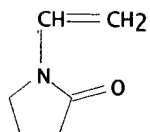
CMF C8 H14 O2



CM 7

CRN 88-12-0

CMF C6 H9 N O



L33 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:197951 HCAPLUS

DOCUMENT NUMBER: 132:255738

TITLE: Hair-smoothing and -styling preparations containing cationized polymers

INVENTOR(S): Ohmura, Takayuki; Nanba, Tomiyuki

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

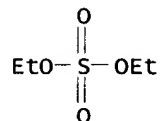
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AB	JP 2000086463	A2	20000328	JP 1998-280548	19980916

Hair cosmetics contain (A) cationic polymers prepd. by modification of copolymers from CH<sub>2</sub>:CR<sub>1</sub>COXR<sub>2</sub>NR<sub>3</sub>R<sub>4</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub> = C<sub>1</sub>-4 alkylene; R<sub>3</sub>, R<sub>4</sub> = C<sub>1</sub>-4 alkyl; X = O, NH) 50-90, CH<sub>2</sub>:CR<sub>5</sub>CO<sub>2</sub>R<sub>6</sub> (R<sub>5</sub> = H, Me; R<sub>6</sub> = C<sub>12</sub>-24 alkyl) 10-50, and other monomers 0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C<sub>1</sub>-4 alkyl sulfate residue; E = C<sub>1</sub>-12 alkyl, benzyl, C<sub>1</sub>-3 fatty acid C<sub>1</sub>-4 alkyl ester residue) and (B) phospholipids, proteins, protein hydrolyzates, and/or their derivs. A hair prepn. contg. decamethylcyclopentasiloxane 15.0, soya lecithin 1.0, elastin 1.0, 1,3-butylene glycol 2.0, polyoxyethylene hydrogenated castor oil 2.0, dimethylaminoethyl methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate copolymer compd. with Et<sub>2</sub>SO<sub>4</sub> 1.0, EtOH 15.0, perfume, and H<sub>2</sub>O to 100 wt.% showed hair-smoothing, -styling, and -conditioning effects.

IT 261949-40-0P  
 RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (hair-smoothing and -styling preps. contg. cationized polymers and phospholipids and/or proteins (hydrolyzates))

RN 261949-40-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

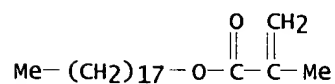
CM 1

CRN 64-67-5  
CMF C4 H10 O4 S

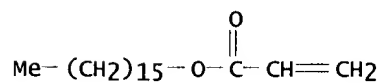
CM 2

CRN 182241-14-1  
CMF (C22 H42 O2 . C19 H36 O2 . C10 H19 N O2 . C8 H14 O2 . C6 H9 N O)x  
CCI PMS

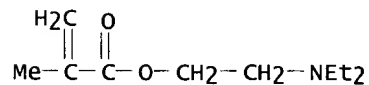
CM 3

CRN 32360-05-7  
CMF C22 H42 O2

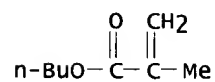
CM 4

CRN 13402-02-3  
CMF C19 H36 O2

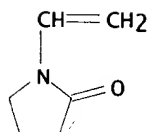
CM 5

CRN 105-16-8  
CMF C10 H19 N O2

CM 6

CRN 97-88-1  
CMF C8 H14 O2

CM 7

CRN 88-12-0  
CMF C6 H9 N O

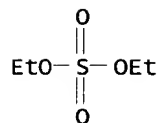
L33 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:197950 HCAPLUS  
 DOCUMENT NUMBER: 132:241656  
 TITLE: Hair-smoothing and -styling preparations  
 containing cationic polymers and silyl  
 peptides  
 INVENTOR(S): Ohmura, Takayuki; Nanba, Tomiyuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2000086462	A2	20000328	JP 1998-280547	19980916
AB	Hair cosmetics contain (A) cationic polymers prepd. by modification of copolymers from CH <sub>2</sub> :CR <sub>1</sub> COXR <sub>2</sub> NR <sub>3</sub> R <sub>4</sub> (R <sub>1</sub> = H, Me; R <sub>2</sub> = C1-4 alkylene; R <sub>3</sub> , R <sub>4</sub> = C1-4 alkyl; X = O, NH) 50-90, CH <sub>2</sub> :CR <sub>5</sub> CO <sub>2</sub> R <sub>6</sub> (R <sub>5</sub> = H, Me; R <sub>6</sub> = C12-24 alkyl) 10-50, and other monomers 0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C1-4 alkyl sulfate residue; E = C1-12 alkyl, benzyl, C1-3 fatty acid C1-4 alkyl ester residue) and (B) silyl peptides R <sub>7</sub> R <sub>8</sub> R <sub>9</sub> Si(CH <sub>2</sub> ) <sub>a</sub> [NHCH[R <sub>10</sub> NH(CH <sub>2</sub> ) <sub>a</sub> SiR <sub>7</sub> R <sub>8</sub> R <sub>9</sub> ] CO] <sub>m</sub> (NHCHR <sub>11</sub> CO) <sub>n</sub> OH or R <sub>7</sub> R <sub>8</sub> R <sub>9</sub> Si(CH <sub>2</sub> ) <sub>a</sub> OCH <sub>2</sub> CH(OH)CH <sub>2</sub> [NHCH[R <sub>10</sub> NHCH <sub>2</sub> CH(OH)C H <sub>2</sub> O(CH <sub>2</sub> ) <sub>a</sub> SiR <sub>7</sub> R <sub>8</sub> R <sub>9</sub> ] <sub>m</sub> (NHCHR <sub>11</sub> CO) <sub>n</sub> OH [R <sub>7</sub> -R <sub>9</sub> = C1-3 alkyl, OH; R <sub>10</sub> = basic amino acid residue; R <sub>11</sub> = amino acid side chain other than R <sub>11</sub> ; a = 1, 3; m, n = 0-200; m + n = 1-200; m and n indicate the nos. of amino acids and do not show the order of amino acid sequences]. A hair prepn. contg. decamethylcyclopentasiloxane 15.0, collagen hydrolyzate .gamma.-glycidoxypropyldimethoxymethylsilane deriv. 1.5, yeast protein hydrolyzate .gamma.-glycidoxypropyldiethoxymethylsilane deriv. 1.5, 1,3-butylene glycol 2.0, polyoxyethylene hydrogenated castor oil 2.0, dimethylaminoethyl methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate copolymer compd. with Et <sub>2</sub> SO <sub>4</sub> 1.0, EtOH 15.0, perfume, and H <sub>2</sub> O to 100 wt.% showed hair-smoothing, -styling, and -conditioning effects.				
IT	261949-40-0p RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair-smoothing and -styling preps. contg. cationized polymers and silyl peptides)				
RN	261949-40-0 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, compd. with diethyl sulfate (9CI) (CA INDEX NAME)				

CM 1

CRN 64-67-5  
CMF C4 H10 O4 S





CM 2

CRN 182241-14-1

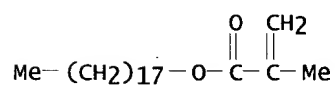
CMF (C22 H42 O2 . C19 H36 O2 . C10 H19 N O2 . C8 H14 O2 . C6 H9 N O)x

CCI PMS

CM 3

CRN 32360-05-7

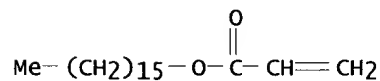
CMF C22 H42 O2



CM 4

CRN 13402-02-3

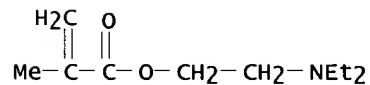
CMF C19 H36 O2



CM 5

CRN 105-16-8

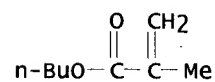
CMF C10 H19 N O2



CM 6

CRN 97-88-1

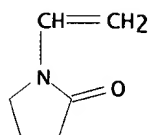
CMF C8 H14 O2



CM 7

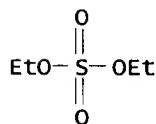
CRN 88-12-0

CMF C6 H9 N O



L33 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:197949 HCAPLUS  
 DOCUMENT NUMBER: 132:241655  
 TITLE: Hair cosmetics containing polysiloxane-oxyalkylene block copolymers and cationic polymers  
 INVENTOR(S): Omura, Takayuki; Nanba, Tomiyuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2000086460	A2	20000328	JP 1998-280545	19980916
AB	Hair cosmetics contain (A) polysiloxane-oxyalkylene block copolymers [R1(SiMe2O)aSiMe2R2O(C2H4O)b(C3H6O)c]x (I; R1, R2 = C2-4 hydrocarbylene; a = 1-1000; b, c = 0-1000; b = c .noteq. 0; x = 1-100) and (B) cationic polymers prep'd. by modification of copolymers from CH2:CR3COXR4NR5R6 (R3 = H, Me; R4 = C1-4 alkylene; R5, R6 = C1-4 alkyl; X = O, NH) 50-90, CH2:CR7CO2R8 (R7 = H, Me; R8 = C12-24 alkyl) 10-50, and other monomers 0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C1-4 alkyl sulfate residue; E = C1-12 alkyl, benzyl, C1-3 fatty acid C1-4 alkyl ester residue). A hair prep'n. contg. decamethylcyclopentasiloxan e 15.0, I (R1 = R2 = C3H6, a = 60, b = c = 40, x = 10) 3.0, 1,3-butylene glycol 2.0, polyoxyethylene hydrogenated castor oil 2.0, dimethylaminoethyl methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate copolymer comp'd. with Et2SO4 1.0, EtOH 15.0, perfume, and H2O to 100 wt.% showed hair-smoothing, -styling, and -conditioning effects. IT 261949-40-0P RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair-smoothing and -styling preps. contg. polysiloxane-oxyalkylene block copolymers and cationized polymers) RN 261949-40-0 HCAPLUS CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, comp'd. with diethyl sulfate (9CI) (CA INDEX NAME) CM 1 CRN 64-67-5 CMF C4 H10 O4 S				



CM 2

CRN 182241-14-1

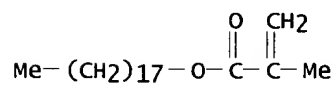
CMF (C22 H42 O2 . C19 H36 O2 . C10 H19 N O2 . C8 H14 O2 . C6 H9 N O)x

CCI PMS

CM 3

CRN 32360-05-7

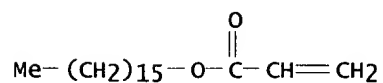
CMF C22 H42 O2



CM 4

CRN 13402-02-3

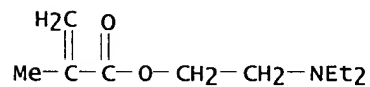
CMF C19 H36 O2



CM 5

CRN 105-16-8

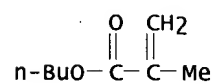
CMF C10 H19 N O2



CM 6

CRN 97-88-1

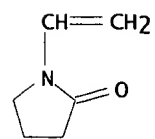
CMF C8 H14 O2



CM 7

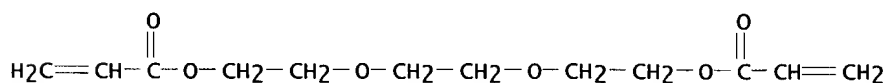
CRN 88-12-0

CMF C6 H9 N O



L33 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:120828 HCAPLUS  
 DOCUMENT NUMBER: 132:170862  
 TITLE: Cosmetics containing sequestering agents,  
 surfactants, and sunscreens  
 INVENTOR(S): Sou, Suehito; Tokue, Wataru  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

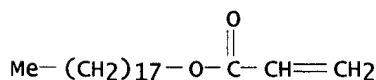
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2000053559	A2	20000222	JP 1998-237999	19980810
AB	This present invention relates to cosmetics which display an excellent emulsification stability along with improved UV blocking properties and skin feels. The invention cosmetics comprise (1) metal sequestering agents, (2) (meth)acrylamide copolymer emulsifiers, and (3) sunscreens. A skin-care cream contained jojoba oil 3, vitamin A acetate 0.01, ethylparaben 0.3, behenyl alc. 5, methylphenylpolysiloxane 47, glycerin 2, Na3EDTA 0.2, N,N-dimethylaminoethyl methacrylate-N-vinylpyrrolidone-stearyl acrylate-tripropylene glycol diacrylate copolymer (emulsifier) 1, lactic acid 0.5, ethanol 1, and ion-exchanged water q.s. to 100 %.				
IT	160364-67-0P RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses) (cosmetics contg. sequestering agents and surfactants and sunscreens)				
RN	160364-67-0 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	42978-66-5				
CMF	C15 H24 O6				
CCI	IDS				
CDES	*				



3 ( D1-Me )

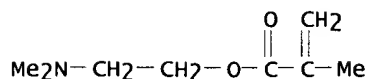
CM 2

CRN 4813-57-4  
 CMF C21 H40 O2



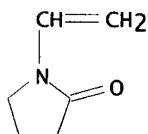
CM 3

CRN 2867-47-2  
CMF C8 H15 N O2



CM 4

CRN 88-12-0  
CMF C6 H9 N O



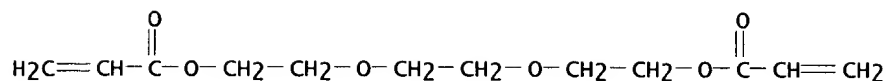
L33 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1998:674798 HCAPLUS  
DOCUMENT NUMBER: 130:7257  
TITLE: Hair dyes containing viscosity enhancers  
INVENTOR(S): Kawazoe, Tomoyuki  
PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 10279443	A2	19981020	JP 1997-96468	19970331
AB	Hair dye preps. comprise cationic polymers as viscosity enhancing agents, polysiloxane-alkylene oxide copolymers, and direct dyes. A hair gel contained N,N-dimethylaminoethyl methacrylate-N-vinylpyrrolidone-stearyl acrylate-tripropylene glycol diacrylate copolymer 3, dimethylsilanediol-ethylene oxide-propylene oxide block copolymer 0.05, Black 401 0.2, Yellow 403 0.1, Red 227 0.1, ethanol 20, phosphoric acid 0.9, polyoxyethylene polyoxypropylene decyl tetradecyl ether 0.1, perfumes 0.1, and water to 100 %.				
IT	160364-67-0	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (uses) (hair dyes contg. viscosity enhancers and siloxane -polyoxyalkylenes)			
RN	160364-67-0	HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)				

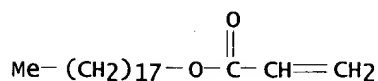
CM 1

CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS  
CDES \*

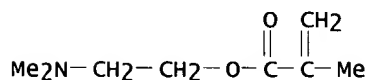


3 ( D1-Me )

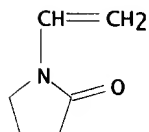
CM 2

CRN 4813-57-4  
CMF C21 H40 O2

CM 3

CRN 2867-47-2  
CMF C8 H15 N O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

L33 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1998:603043 HCAPLUS  
 DOCUMENT NUMBER: 129:293670  
 TITLE: Hair-setting compositions  
 INVENTOR(S): Oomura, Takayuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10245325	A2	19980914	JP 1997-63803	19970303

AB Hair-setting compns. showing excellent hair-setting effects contain: [A] amphoteric betainized dialkylaminoalkylacrylate copolymer having mol. wt. of 50,000-500,000 and [B] specific cationic copolymers such as cationized

dimethylaminoethyl (meth)acrylate-lauryl (meth)acrylate-cetyl (meth)acrylate copolymer. Thus, a hair cream contained decamethylcyclohexasiloxane 25.0, dimethylpolysiloxane 6.0, glycerin 3.0, ethylated hardened castor oil 3.0, amphoteric polymers 3.0, cationized resin soln. 3.0, ethanol 10.0, polyvinyl alc. 1.0, ion-exchanged water and perfumes to 100 wt.%.  
 214122-08-4P

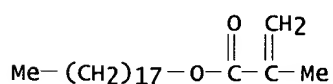
IT 214122-08-4P  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cationized; hair-setting comps.)

RN 214122-08-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

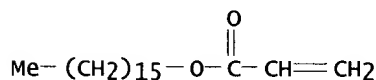
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CM 2

CRN 13402-02-3

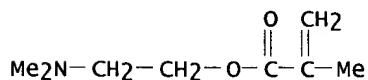
CMF C19 H36 O2



CM 3

CRN 2867-47-2

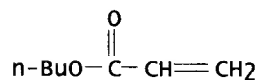
CMF C8 H15 N O2



CM 4

CRN 141-32-2

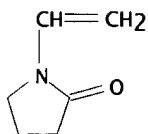
CMF C7 H12 O2



CM 5

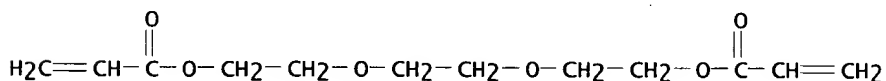
CRN 88-12-0

CMF C6 H9 N O



L33 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1998:423963 HCAPLUS  
 DOCUMENT NUMBER: 129:140453  
 TITLE: Hair-setting agent composition with improved  
 set retention and feel  
 INVENTOR(S): Omura, Takayuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

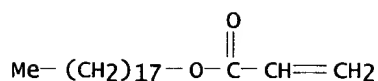
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 10175828	A2	19980630	JP 1996-353100	19961213
AB	The compn. comprises (a) oil components, (b) lower alcs., (c) water, (d) emulsifiers of specified polyether-modified silicones, and (e) 0.1-30% cationic acrylic thickening agents. A compn. comprised di-Me siloxane (6 Cs) 6, di-Me siloxane (d.p. 3,000) 3, 50% isoparaffin soln. of Me <sub>3</sub> Si(Me <sub>2</sub> SiO) <sub>400</sub> [Me(CH <sub>2</sub> ) <sub>30</sub> (C <sub>2</sub> H <sub>40</sub> ) <sub>24</sub> (C <sub>3</sub> H <sub>60</sub> ) <sub>24</sub> H] 10SiMe <sub>3</sub> 2, ion-exchanged water 10, EtOH 79.5, cationic thickening agent 2.5 and H <sub>3</sub> PO <sub>4</sub> 0.5%.				
IT	160364-67-0, N,N-Dimethylaminoethyl methacrylate-N-vinylpyrrolidone-stearyl acrylate-tripropylene glycol diacrylate copolymer RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (thickening agent; hair setting agent compn. with improved set retention and feel)				
RN	160364-67-0 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)				
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CRN	42978-66-5				
CMF	C15 H24 O6				
CCI	IDS				
CDES	*				



3 (D1-Me)

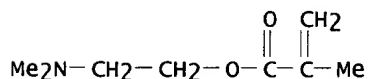
CM 2  
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 CMF C21 H40 O2





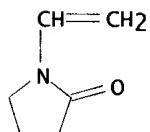
CM 3

CRN 2867-47-2  
CMF C8 H15 N O2



CM 4

CRN 88-12-0  
CMF C6 H9 N O



L33 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1997:562220 HCAPLUS  
 DOCUMENT NUMBER: 127:225104  
 TITLE: Cool gel cosmetics  
 INVENTOR(S): Hanada, Takuya  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09208452	A2	19970812	JP 1996-332749	19961128
PRIORITY APPLN. INFO.:			JP 1995-334000	19951129

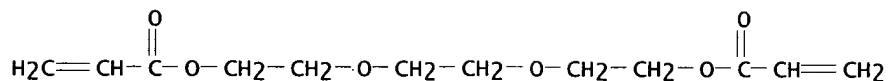
AB Cool gel cosmetics comprise cationic thickeners, refrigerants, ethanol and optionally powders. A massage cool gel contained glycerin 20.0, ethanol 30.0, N,N-dimethylaminoethyl methacrylate, N-vinyl pyrrolidone-stearyl acrylate-tripropylene glycol diacrylate copolymer as cationic thickener 3.0, lactic acid 1.0, 1-isomenthol 1.0, polyethylene powder 3.0, ethylene-methylsiloxane copolymer 2.0, iso-Pr myristate 2.0, squalane 1.0 perfumes and ion-exchanged water to 100 wt.%. The preps. were nonsticky.

IT 160364-67-0P  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cool gel cosmetics)

RN 160364-67-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

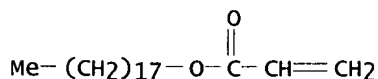
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 CMF C15 H24 O6  
 CCI IDS  
 CDES \*



3 ( D1-Me )

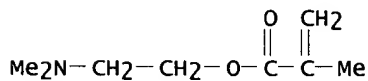
CM 2

CRN 4813-57-4  
 CMF C21 H40 O2



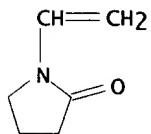
CM 3

CRN 2867-47-2  
 CMF C8 H15 N O2



CM 4

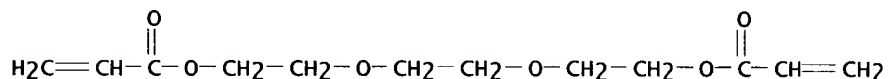
CRN 88-12-0  
 CMF C6 H9 N O



L33 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1997:537399 HCAPLUS  
 DOCUMENT NUMBER: 127:140183  
 TITLE: Hair-setting compositions  
 INVENTOR(S): Omura, Takayuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

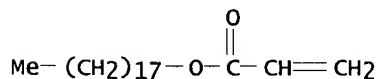
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 09151117	A2	19970610	JP 1995-334001	19951129

AB Hair-setting compns. showing excellent styling activity comprise cationic thickeners and organosilicones having  $R_7nSiO(4-n)/2$  units [ $R_7 = C1-6$  hydrocarbones or Ph;  $n = 1.0-1.8$ ] as main ingredients. A hair cream contained decamethylcyclohexasiloxane 25.0, dimethylpolysiloxane ( $n = 10,000$ ) 6.0, organosilicon 5.0, ethoxylated hardened castor oil 2.0, glycerin 3.0, cationic thickeners 1.0, ethanol 10.0, polyvinyl alc. 1.0, maleic acid 0.4, perfumes and ion-exchanged water to 100 wt.%.  
IT 160364-67-0P  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair-setting compns.)  
RN 160364-67-0 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)  
CM 1  
CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS  
CDES \*

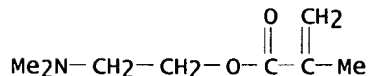


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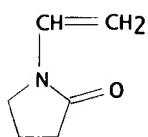
CM 2  
CRN 4813-57-4  
CMF C21 H40 O2



CM 3  
CRN 2867-47-2  
CMF C8 H15 N O2

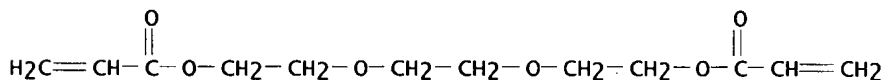


CM 4  
CRN 88-12-0  
CMF C6 H9 N O



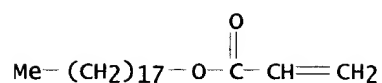
L33 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1997:537398 HCAPLUS  
 DOCUMENT NUMBER: 127:140182  
 TITLE: Hair preparations  
 INVENTOR(S): Omura, Takayuki; Muraoka, Shiho; Miyahara, Reiji  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 09151118	A2	19970610	JP 1995-334002	19951129
AB	Hair preps. comprise: (A) polysiloxane-oxyalkylene copolymers and (B) cationic thickeners (acrylic copolymers). A hair cream contained decamethylsiloxane 25.0, polysiloxane-oxyalkylene copolymer 6.0, glycerin 3.0, ethoxylated hardened castor oil 3.0, cationic thickener such as N,N-Dimethylaminoethyl methacrylate-methacrylamide-stearyl acrylate-tripropylene glycol diacrylate copolymer 3.0, ethanol 10.0, polyvinyl alc. 1.0, maleic acid 0.5, perfumes and ion-exchanged water to 100 wt.%. Hair appeared shiny and soft after treatment and showed good hair wave-holding activity. The preps. also restored damaged hair.				
IT	160364-67-0P	168695-46-3P	RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair preps.)		
RN	160364-67-0	HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanedyl)bis[oxy(methyl-2,1-ethanedyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	42978-66-5				
CMF	C15 H24 O6				
CCI	IDS				
CDES	*				

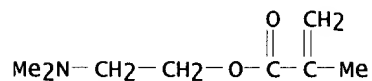


3 (D1-Me)

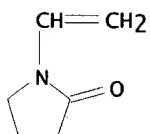
CM 2  
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CM 3

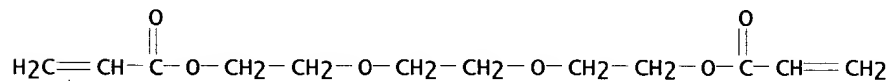
CRN 2867-47-2  
CMF C8 H15 N O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

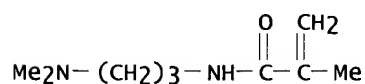
RN 168695-46-3 HCAPLUS  
CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]  
ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide,  
1-ethenyl-2-pyrrolidinone and octadecyl 2-propenoate (9CI) (CA INDEX  
NAME)

CM 1

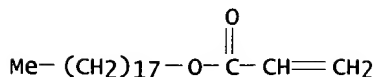
CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS  
CDES \*

3 (D1-Me)

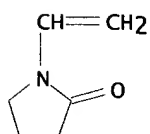
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CMF C9 H18 N2 O

CM 3

CRN 4813-57-4  
CMF C21 H40 O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

L33 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:353967 HCAPLUS

DOCUMENT NUMBER: 126:334200

TITLE: Cosmetic composition including at least one  
silicone-grafted polymer and at least one  
combination of an anionic polymer and a  
cationic polymerINVENTOR(S): Dubief, Claude; Cauwet-Martin, Daniele; Dupuis,  
ChristinePATENT ASSIGNEE(S): L'Oreal S. A., Fr.; Dubief, Claude; Cauwet-Martin,  
Daniele; Dupuis, Christine

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9712588	A1	19970410	WO 1996-FR1439	19960916
W: BR, CA, JP, KR, PL, RU, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2739289	A1	19970404	FR 1995-11486	19950929
FR 2739289	B1	19971107		
CA 2222997	AA	19970410	CA 1996-2222997	19960916
EP 853470	A1	19980722	EP 1996-931857	19960916
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 10512290	T2	19981124	JP 1996-514011	19960916
BR 9610834	A	19990713	BR 1996-10834	19960916
RU 2143886	C1	20000110	RU 1997-122072	19960916
PRIORITY APPLN. INFO.:				
FR 1995-11486				A 19950929
WO 1996-FR1439				W 19960916

AB A cosmetic or dermatol. compn. for treating keratinous material, particularly hair, including a cosmetically or dermatol. acceptable medium contg. at least one silicone-grafted polymer with a polysiloxane portion and a portion consisting of a non-silicone org. chain, wherein one of the two portions constitutes the main polymeric chain while the other is grafted onto said main chain, and at least one combination of at least one anionic polymer and at least one cationic polymer. Such compns. are particularly suitable

for use as rinsable or non-rinsable products for washing and conditioning hair, hair setting or hair styling. A hair mousse contained a silicone-grafted polymer contg. 3-thiopropylmethacrylate group 0.55, maleic anhydride-methylvinyl ether copolymer (Gantrez ES 425) 0.55 g, Celquat L200 0.55, aminomethylpropanol q.s. pH = 7.5, ethanol 11.1, and water q.s. 100 g.

IT 83120-95-0

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cosmetic compn. including silicone-grafted polymer and combination of anionic polymer and cationic polymer)

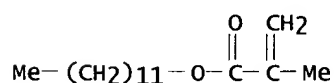
RN 83120-95-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 142-90-5

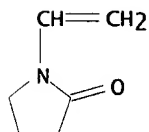
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CM 2

CRN 88-12-0

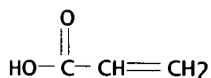
CMF C6 H9 N O



CM 3

CRN 79-10-7

CMF C3 H4 O2



L33 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:101501 HCAPLUS

DOCUMENT NUMBER: 126:108630

TITLE: Hair preparations containing cationic thickeners and water-soluble silicones

INVENTOR(S): Kanbe, Tetsuya

PATENT ASSIGNEE(S): Shiseido Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

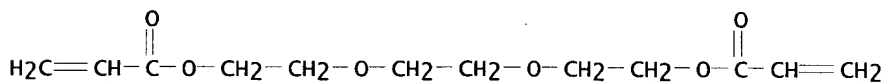
PATENT INFORMATION:

PATENT NO.

KIND DATE

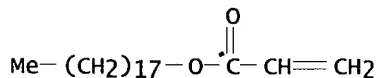
APPLICATION NO. DATE

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 JP 08310922 A2 19961126 JP 1995-141275 19950516  
 AB Hair preps. showing good hair setting property  
 contain 0.1-10.0 wt.% cationic thickeners and 0.1-20.0 wt.%  
 water-sol. silicones. A hair treatment lotion  
 contained cationic thickener 1.5, water-sol. silicone  
 2.0, 1,3-butylene glycol 3.0, methylparaben 0.1, POE oleate 0.5, ethanol  
 25.0, phosphoric acid 0.45 and ion-exchanged water to 100 wt.%.  
 Hair appeared soft and shiny after treatment.  
 IT 160364-67-0P  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (hair preps. contg. cationic thickeners and  
 water-sol. silicones)  
 RN 160364-67-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with  
 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-  
 ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX  
 NAME)  
 CM 1  
 CRN 42978-66-5  
 CMF C15 H24 O6  
 CCI IDS  
 CDES \*

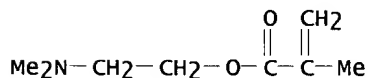


3 ( D1-Me )

CM 2  
 CRN 4813-57-4  
 CMF C21 H40 O2

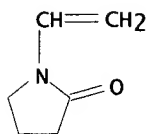


CM 3  
 CRN 2867-47-2  
 CMF C8 H15 N O2



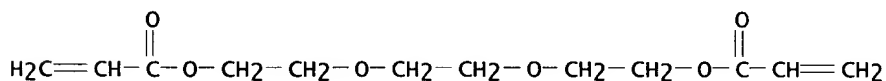
CM 4  
 CRN 88-12-0  
 CMF C6 H9 N O





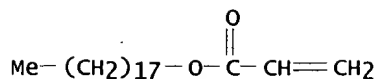
L33 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1997:97081 HCAPLUS  
 DOCUMENT NUMBER: 126:108631  
 TITLE: Hair preparations containing cationic thickeners and modified silicones  
 INVENTOR(S): Kanbe, Tetsuya  
 PATENT ASSIGNEE(S): Shiseido Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 08310921	A2	19961126	JP 1995-141274	19950516
AB	Nonsticky hair prepns. contain cationic thickeners and amino- or ammonia-modified silicones. A hair prepn. contained cationic thickener 0.1, amino-modified silicone 2.0, isoparaffin 2.0, hardened ethoxylated castor oil 0.2, phosphoric acid 0.06, 1,3-butylene glycol 2.0 and ion-exchanged water to 100 parts. The prepns. caused no damage to hair.				
IT	160364-67-0P RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair prepns. contg. cationic thickeners and modified silicones)				
RN	160364-67-0 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	42978-66-5				
CMF	C15 H24 O6				
CCI	IDS				
CDES	*				

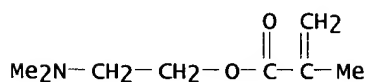


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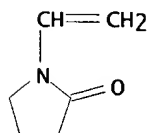
CM 2  
 CRN 4813-57-4  
 CMF C21 H40 O2



CM 3

CRN 2867-47-2  
CMF C8 H15 N O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

L33 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1996:624867 HCAPLUS  
 DOCUMENT NUMBER: 125:256762  
 TITLE: Hair-setting compositions containing  
 surfactant-fatty acid complexes and cationized  
 polymers  
 INVENTOR(S): Oomura, Takayuki  
 PATENT ASSIGNEE(S): Shiseido Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08208442	A2	19960813	JP 1995-34259	19950131

OTHER SOURCE(S): MARPAT 125:256762

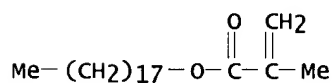
AB Hair-setting compns. contain (A) complexes of amphoteric surfactants and/or semi-polar surfactants with higher fatty acids and (B) cationized polymers prepd. by treatment of copolymers of CH<sub>2</sub>:CR<sub>1</sub>COXR<sub>2</sub>NR<sub>3</sub>R<sub>4</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub> = C1-4 alkylene; R<sub>3</sub>, R<sub>4</sub> = C1-4 alkyl; x = 0, NH) 50-90, CH<sub>2</sub>:CR<sub>5</sub>CO<sub>2</sub>R<sub>6</sub> (R<sub>5</sub> = H, Me; R<sub>6</sub> = C12-24 alkyl) 10-50, and other copolymerizable monomers 0-25 wt.%, with YE (Y = Br, Cl, I, C1-4 alkyl sulfate residue; E = C1-12 alkyl, PhCH<sub>2</sub>, C1-3 fatty acid C1-4 alkyl ester residue). The compns. give gloss to hair, are nonsticky, and show good hair conditioning effect. A hair setting prep. was formulated contg. di-Me polysiloxane, oleic acid, 2-undecyl-N,N,N-(hydroxyethylcarboxymethyl)-2-imidazoline Na salt, di-Et sulfate-treated behenyl methacrylate-cetyl methacrylate-dimethylaminoethyl methacrylate-lauryl acrylate copolymer, EtOH, and water.

IT 182241-14-1DP, cationized  
 RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (hair-setting preps. contg. higher fatty acid-surfactant

complexes and cationized acrylic resins)  
 RN 182241-14-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
 2-(diethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone,  
 hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate (9CI) (CA  
 INDEX NAME)

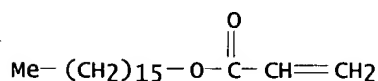
CM 1

CRN 32360-05-7  
 CMF C22 H42 O2



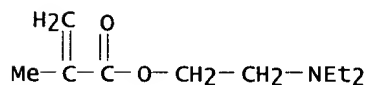
CM 2

CRN 13402-02-3  
 CMF C19 H36 O2



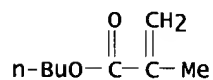
CM 3

CRN 105-16-8  
 CMF C10 H19 N O2



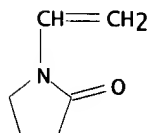
CM 4

CRN 97-88-1  
 CMF C8 H14 O2



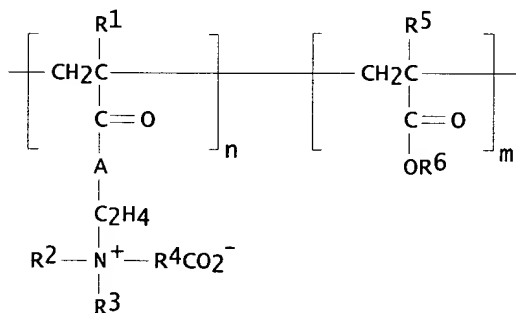
CM 5

CRN 88-12-0  
 CMF C6 H9 N O



L33 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1996:449539 HCAPLUS  
 DOCUMENT NUMBER: 125:123216  
 TITLE: Hair wave-setting preparations containing  
 amphoteric and cationic polymers  
 INVENTOR(S): Oomura, Takayuki  
 PATENT ASSIGNEE(S): Shiseido Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08113517	A2	19960507	JP 1995-36074	19950201
PRIORITY APPLN. INFO.: GI			JP 1994-222513	19940824



AB Hair wave-setting preps. comprise 0.05-10.0 wt.% betaine-contg. dialkylaminoalkyl acrylate copolymers having mol. wt. = 50,000-500,000 (amphoteric polymers) and 0.05-10.0 wt.% cationic acrylic copolymers such as modified cationic dimethylaminoethyl methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate copolymer. Thus, a hair wave-setting cream contained decamethylcyclohexasiloxane 25.0, dimethylpolysiloxane 2.0, glycerin 3.0, ethoxylated castor oil 3.0, amphoteric polymer 1.0, cationic acrylic copolymer 3.0, ethanol 10.0, polyvinyl alc. 1.0, perfumes, and ion-exchanged water to 100 wt.%. The preps. were nonsticky and showed excellent hair wave-setting activity.

IT 178991-24-7D, modified cationic  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair wave-setting preps. contg. amphoteric and cationic polymers)

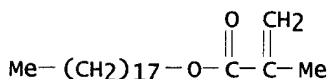
RN 178991-24-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

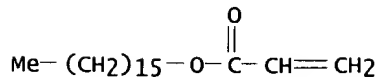
CM 1

CRN 32360-05-7

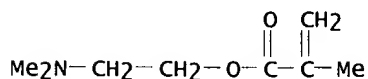
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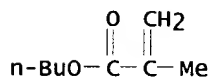
CM 2

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CMF C19 H36 O2

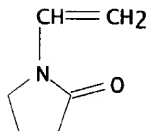
CM 3

CRN 2867-47-2  
CMF C8 H15 N O2

CM 4

CRN 97-88-1  
CMF C8 H14 O2

CM 5

CRN 88-12-0  
CMF C6 H9 N O

L33 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1994:226514 HCAPLUS  
 DOCUMENT NUMBER: 120:226514  
 TITLE: Hair cosmetics containing cationic polymers  
 INVENTOR(S): Narasaki, Kanji; Hayama, Kazuhide; Kawaguchi, Shigeoki  
 PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05310538	A2	19931122	JP 1992-141035	19920507

JP 3143720

B2 20010307

OTHER SOURCE(S):

MARPAT 120:226514

AB Hair cosmetics contain copolymers of CH<sub>2</sub>:CR<sub>1</sub>COAR<sub>2</sub>NR<sub>3</sub>R<sub>4</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub> = C<sub>1</sub>-4 alkylene; R<sub>3</sub>, R<sub>4</sub> = C<sub>1</sub>-4 alkyl; A = O, NH) 50-90, CH<sub>2</sub>:CR<sub>5</sub>CO<sub>2</sub>R<sub>6</sub> (R<sub>5</sub> = H, Me; R<sub>6</sub> = C<sub>12</sub>-24 alkyl) 10-50, and polymg. monomers can polymerize with the the polymg. unsatd. monomers above 0-25 wt.%, modified with cationization agents XB (X = Br, Cl, I, C<sub>1</sub>-4 alkyl sulfate residue; B = C<sub>1</sub>-12 alkyl, benzyl, C<sub>1</sub>-3 fatty acid C<sub>1</sub>-4 alkyl ester residue). The cosmetics show good hair-setting and -conditioning properties. Dimethylaminoethyl methacrylate-lauryl acrylate-cetyl methacrylate-behenyl methacrylate copolymer cationized with di-Et sulfate (prepn. given) 5.0, SH 3771 (di-Me polysiloxane-polyoxyalkylene copolymer) 0.1, perfume, EtOH, and LPG 25.0, to 100 wt.% were formulated into a hair spray.

IT 154150-94-4DP, reaction products with di-Et sulfate

RL: PREP (Preparation)

(prepn. of, hair cosmetics contg.)

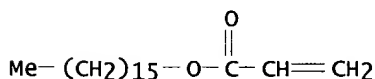
RN 154150-94-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 13402-02-3

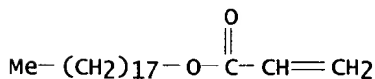
CMF C19 H36 O2



CM 2

CRN 4813-57-4

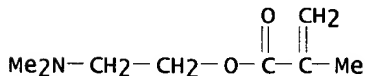
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CM 3

CRN 2867-47-2

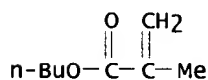
CMF C8 H15 N O2



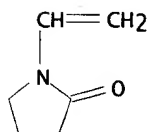
CM 4

CRN 97-88-1

CMF C8 H14 O2



CM 5

CRN 88-12-0  
CMF C6 H9 N O

L33 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1992:27820 HCAPLUS  
 DOCUMENT NUMBER: 116:27820  
 TITLE: Hair-styling conditioners  
 INVENTOR(S): Wells, Robert Lee; King, Bonnie Theresa; Snyder, Michael Albert; Frey, Donald Hugh  
 PATENT ASSIGNEE(S): Procter and Gamble Co., USA  
 SOURCE: PCT Int. Appl., 46 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9115186	A1	19911017	WO 1991-US2168	19910401
W: AU, BR, CA, FI, HU, JP, KR, NO, PL, SU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5120531	A	19920609	US 1990-506410	19900406
AU 9176742	A1	19911030	AU 1991-76742	19910401
CN 1056053	A	19911113	CN 1991-102947	19910406
CN 1065126	B	20010502		

PRIORITY APPLN. INFO.:  
 US 1990-506410 A 19900406  
 WO 1991-US2168 A 19910401

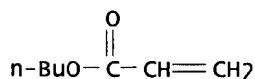
AB A hair conditioner which provides not only hair conditioning benefits, but also hair-styling benefits comprises (1) 0.05-25% of a hair-conditioning agent, preferably a quaternary ammonium-contg. cationic surfactant, (2) 0.2-20.0% of a polymer, with mol. wt. 5000-1,000,000, Tg > -20.degree., and soly. 8.5-12.0 (cal/mL)<sup>1/2</sup>, (3) 0.2-20.0% of a nonaq. solvent having a b.p. .ltoreq.300.degree. and water soly. >0.2% at 25%, and (3) an aq. carrier the balance. A rinse-off hair conditioner contained poly(tert-Bu acrylate) 1.50, Et butyrate 2.50, stearylalkonium chloride 3.80, cetyl alc. 1.35, Ceteth-2 0.80, glyceryl stearate 0.50, quaternized hydrolyzed protein 0.50, citric acid 0.11, NaCl 0.10, Kathon CG 0.03, and water to 100%.

IT 92832-85-4, Butyl acrylate-vinyl acetate-vinylpyrrolidone copolymer 138216-02-1  
 RL: BIOL (Biological study)  
 (hair conditioners contg. quaternary ammonium compds. and)

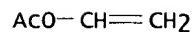
RN 92832-85-4 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

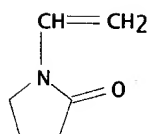
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CRN 141-32-2  
CMF C7 H12 O2

CM 2

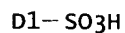
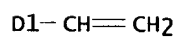
CRN 108-05-4  
CMF C4 H6 O2

CM 3

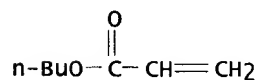
CRN 88-12-0  
CMF C6 H9 N O

RN 138216-02-1 HCAPLUS  
CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate,  
ethenylbenzenesulfonic acid and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX  
NAME)

CM 1

CRN 26914-43-2  
CMF C8 H8 O3 S  
CCI IDS  
CDES 8:ID

CM 2

CRN 141-32-2  
CMF C7 H12 O2

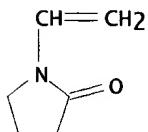
CM 3

CRN 108-05-4  
CMF C4 H6 O2



ACO-CH=CH<sub>2</sub>

CM 4

CRN 88-12-0  
CMF C6 H9 N O

L33 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1991:566361 HCAPLUS  
 DOCUMENT NUMBER: 115:166361  
 TITLE: Hair spray compositions containing  
 silicones and dispersing agents  
 INVENTOR(S): Murphy, Carolyn S.; Prausnitz, Mark R.  
 PATENT ASSIGNEE(S): Procter and Gamble Co., USA  
 SOURCE: U.S., 8 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4983418	A	19910108	US 1989-429895	19891031
CA 2003391	AA	19910430	CA 1989-2003391	19891120
CA 2003391	C	19950131		
EP 431219	A1	19910612	EP 1989-312073	19891121
EP 431219	B1	19940525		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
BR 9000419	A	19911008	BR 1990-419	19900131
AU 9048998	A1	19910509	AU 1990-48998	19900201
AU 641137	B2	19930916		
JP 03145414	A2	19910620	JP 1990-39555	19900220
PRIORITY APPLN. INFO.:			US 1989-429895	19891031

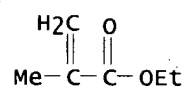
AB A hair spray compn. comprises a silicone gum 0.05-10.0%, a surfactant or a hydrophobically-modified clay suspending or antiagglomerating agent 0.05-7.5%, and a volatile carrier such as EtOH. The compn. further contains a hair-holding resin. A hair spray compn. contained isobutane propellant 75.00, EtOH 22.00, polydimethylsiloxane 2.50, silica 0.50, cyclomethicone 1.50, stearylalkonium hectorite (Bentone-27) 0.10, vinylpyrrolidone-vinyl acetate copolymer 10.00, and fragrance 0.10%. The hair spray provided improved hair conditioning and volumizing benefits with a softer feeling.

IT 26589-26-4  
 RL: BIOL (Biological study)  
 (hair sprays contg. silicone microemulsions and)

RN 26589-26-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-2-pyrrolidinone and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

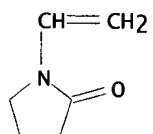
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CRN 97-63-2  
CMF C6 H10 O2



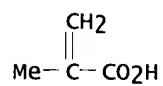
CM 2

CRN 88-12-0  
CMF C6 H9 N O



CM 3

CRN 79-41-4  
CMF C4 H6 O2



comp A, B &amp; C

5/21

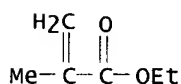
(D = 0%)

FUBARA 09/762,039

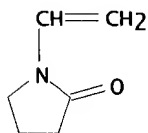
=&gt; d ibib abs hitstr L36 1-27

L36 ANSWER 1 OF 27 HCAPLUS) COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 2001:693795 HCAPLUS  
TITLE: Hair styling compositions containing  
polymers  
INVENTOR(S): Brandt, Lorelei Marie; Neill, Paul Howard; wydila,  
John Edward  
PATENT ASSIGNEE(S): Unilever Home & Personal Care Usa, Division of  
Conopco, Inc., USA  
SOURCE: U.S. Pat. Appl. Publ., 9 pp., Cont. of U.S. Ser. No.  
275,149.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

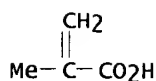
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2001022967	A1	20010920	US 2001-826498	20010404
PRIORITY APPLN. INFO.:				US 1999-275149	A1 19990324
AB	The compn. comprises: <1.5% 1 or more holding polymers, 1 or more saccharides having monomeric units >2, and a carrier. Thus, a formulation contained hydroxyethyl cellulose 0.125, Polymer-1189 [1-vinyl-2- pyrrolidone/vinylcaprolactam-3-(N-dimethylaminopropyl)methacrylamide] copolymer 3.125 and water qs to 100%. The effect of the formulation on the hair curl retention was detd.				
IT	26589-26-4				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (hair styling compns. contg. polymers)				
RN	26589-26-4	HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-2-pyrrolidinone and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	97-63-2				
CMF	C6 H10 O2				



CM 2  
CRN 88-12-0  
CMF C6 H9 N O

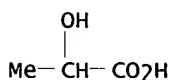


CM 3  
CRN 79-41-4  
CMF C4 H6 O2

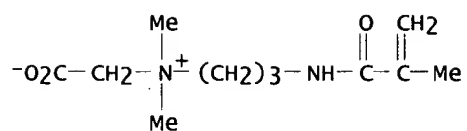


L36 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2001:129691 HCAPLUS  
 DOCUMENT NUMBER: 134:183280  
 TITLE: Cationic polymer bases for hair  
 -styling preparations  
 INVENTOR(S): Uchiyama, Yujiro  
 PATENT ASSIGNEE(S): Osaka Yuki Kagaku Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

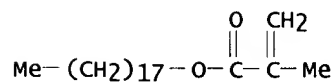
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2001048755	A2	20010220	JP 1999-220201	19990803
AB	The bases comprise copolymers from monomers contg. CH <sub>2</sub> :CR <sub>1</sub> COXR <sub>2</sub> N+Me <sub>2</sub> CH <sub>2</sub> CO <sub>2</sub> -1-30, CH <sub>2</sub> :CR <sub>1</sub> COXR <sub>2</sub> NMe <sub>2</sub> 1-30, and CH <sub>2</sub> :CHNHCOR <sub>1</sub> and/or N-vinylpyrrolidone (NVP) 40-90 wt.% (X = O, NH; R <sub>1</sub> = H, Me; R <sub>2</sub> = C <sub>2</sub> -3 alkylene). A hair-styling lotion contg. a copolymer from N-methacryloyloxyethyl-N,N-dimethylammonium-.alpha.-N-methylcarboxybetaine 20, N,N-dimethylaminoethyl methacrylate 5, NVP 60, and N-vinylacetamide 15 wt. parts improved hair curl retention and showed hair -conditioning effects.				
IT	326833-09-4P	326833-14-1P			
	RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses) (cationic polymer bases for hair-styling preps.)				
RN	326833-09-4	HCAPLUS			
CN	1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, inner salt, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, dodecyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, ethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate, 2-hydroxypropenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	50-21-5				
CMF	C3 H6 O3				



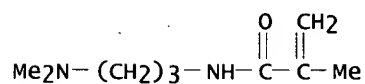
CM	2
CRN	326833-08-3
CMF	(C <sub>22</sub> H <sub>42</sub> O <sub>2</sub> . C <sub>16</sub> H <sub>30</sub> O <sub>2</sub> . C <sub>11</sub> H <sub>20</sub> N <sub>2</sub> O <sub>3</sub> . C <sub>9</sub> H <sub>18</sub> N <sub>2</sub> O . C <sub>8</sub> H <sub>15</sub> N O <sub>2</sub> . C <sub>6</sub> H <sub>10</sub> O <sub>2</sub> . C <sub>6</sub> H <sub>9</sub> N O) <sub>x</sub>
CCI	PMS
CM	3
CRN	83623-26-1
CMF	C <sub>11</sub> H <sub>20</sub> N <sub>2</sub> O <sub>3</sub>



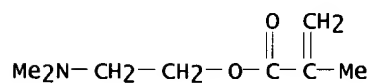
CM 4

 CRN 32360-05-7  
 CMF C22 H42 O2


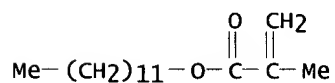
CM 5

 CRN 5205-93-6  
 CMF C9 H18 N2 O


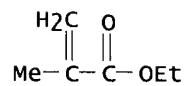
CM 6

 CRN 2867-47-2  
 CMF C8 H15 N O2


CM 7

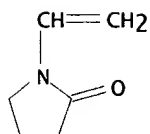
 CRN 142-90-5  
 CMF C16 H30 O2


CM 8

 CRN 97-63-2  
 CMF C6 H10 O2


CM 9

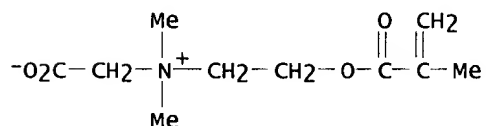
CRN 88-12-0  
CMF C6 H9 N O



RN 326833-14-1 HCAPLUS  
CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

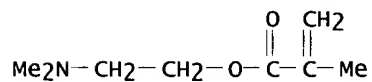
CM 1

CRN 62723-61-9  
CMF C10 H17 N O4



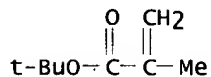
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



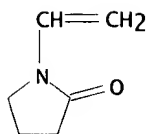
CM 3

CRN 585-07-9  
CMF C8 H14 O2

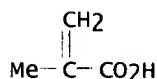


CM 4

CRN 88-12-0  
CMF C6 H9 N O



CM 5

CRN 79-41-4  
CMF C4 H6 O2

L36 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:457113 HCAPLUS  
 DOCUMENT NUMBER: 133:89954  
 TITLE: Hydrophilic ampholytic polymer  
 INVENTOR(S): Galleguillos, Ramiro; Budrevich, Jodi A.; Chiarelli, Joseph A.; Bathina, Harinath B.; Amjad, Zahid  
 PATENT ASSIGNEE(S): B.F. Goodrich Company, USA  
 SOURCE: PCT Int. Appl., 77 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039176	A1	20000706	WO 1999-US30782	19991222

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-222495 A 19981229

AB A hydrophilic ampholytic polymer is formed by copolymn. of: 0.05-20 mol% of an anionic monomer having at least one carboxy functional group; 10-45 mol% of a cationic monomer having at least one amino-functional group; 35-95 mol% of a non-ionic hydrophilic monomer; 0-10 mol% of a hydrophobic monomer; and, 0-1.5 mol% of a crosslinking monomer, wherein the monomers are selected so as to provide the copolymer with a glass temp. of >50.degree. and the cationic monomer and the anionic monomer are present in a ratio of 2-16. The polymer is suitable for use as a thickener or rheol. modifier in personal care formulations, such as shampoo, conditioner, and the like, as a bioadhesive, and for other pharmaceutical applications. A polymer was prepd. by radical polymn. of a mixt. of dimethylaminopropyl methacrylamide, hydroxyethyl methacrylate, methacrylic acid, and trimethylolpropane trimethacrylate.

IT 280133-04-2P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (hydrophilic ampholytic polymer)

RN 280133-04-2 HCAPLUS

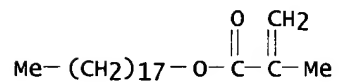
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, octadecyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX

NAME)

CM 1

CRN 32360-05-7

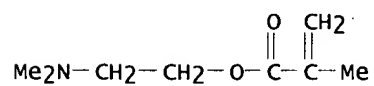
CMF C22 H42 O2



CM 2

CRN 2867-47-2

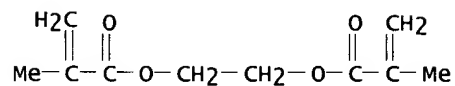
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CM 3

CRN 97-90-5

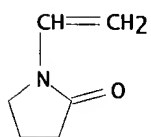
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CM 4

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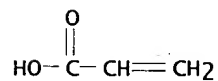
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CM 5

CRN 79-10-7

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REFERENCE COUNT:  
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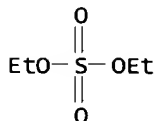
3

- (1) Hoechst Ag; DE 9016661 U 1991
- (2) Philips Petroleum Co; EP 0479245 A 1992 HCAPLUS
- (3) Sumitomo Chem Co; FR 2393011 A 1978 HCAPLUS



L36 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 2000:199286 HCAPLUS  
 DOCUMENT NUMBER: 132:241661  
 TITLE: Hair cosmetics containing waxes, surfactants, and cationic polymers and manufacture thereof  
 INVENTOR(S): Ohmura, Takayuki; Nanba, Tomiyuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2000086456	A2	20000328	JP 1998-255391	19980909
AB	Hair cosmetics contain (A) fine particles of (semi)solid waxes, (B) amphoteric surfactants and/or semipolar surfactants and nonionic surfactants finely dispersed in waxes, and (C) cationic polymers prep'd. by modification of copolymers from CH <sub>2</sub> :CR <sub>1</sub> COXR <sub>2</sub> NR <sub>3</sub> R <sub>4</sub> (R <sub>1</sub> = H, Me; R <sub>2</sub> = C <sub>1</sub> -4 alkylene; R <sub>3</sub> , R <sub>4</sub> = C <sub>1</sub> -4 alkyl; X = O, NH) 50-90, CH <sub>2</sub> :CR <sub>5</sub> CO <sub>2</sub> R <sub>6</sub> (R <sub>5</sub> = H, Me; R <sub>6</sub> = C <sub>12</sub> -24 alkyl) 10-50, and other monomers 0-25 wt.% with cationization agents YE (Y = Br, Cl, I, C <sub>1</sub> -4 alkyl sulfate residue; E = C <sub>1</sub> -12 alkyl, benzyl, C <sub>1</sub> -3 fatty acid C <sub>1</sub> -4 alkyl ester residue). The cosmetics are manuf'd. by adding the cationic polymers to fine dispersions prep'd. by heating the surfactant-wax mixts. to solubilize the waxes and then cooling the mixts. to ambient temp. A hair lotion contg. carnauba wax 15.0, polyoxyethylene behenyl ether 10.0, 2-undecyl-N,N,N-(hydroxyethyl carboxymethyl)-2-imidazoline sodium salt (Obazoline 662N) 5.0, H <sub>2</sub> O 54.8, dimethylaminoethyl methacrylate-stearyl methacrylate copolymer comp'd. with ClCH <sub>2</sub> CO <sub>2</sub> Et 5.0, ethylparaben 0.2, and EtOH 10.0 wt.% showed hair -smoothing and -styling effects.				
IT	261949-41-1P RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair preps. contg. surfactants finely dispersed in waxes, and cationized acrylic polymers)				
RN	261949-41-1 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and octadecyl 2-methyl-2-propenoate, comp'd. with diethyl sulfate (9CI) (CA INDEX NAME)				
CM	1				
CRN	64-67-5				
CMF	C4 H10 O4 S				



CM 2

CRN 178991-24-7

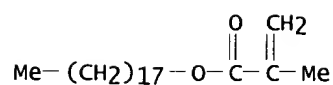
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CCI PMS

CM 3

CRN 32360-05-7

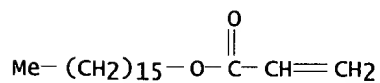
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CM 4

CRN 13402-02-3

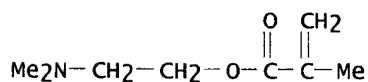
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CM 5

CRN 2867-47-2

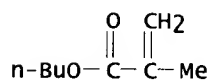
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CM 6

CRN 97-88-1

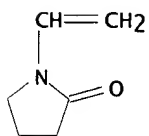
CMF C8 H14 O2



CM 7

CRN 88-12-0

CMF C6 H9 N O



L36 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:197932 HCAPLUS

DOCUMENT NUMBER: 132:227159

TITLE: Nonsticky cosmetic gels containing polymeric thickening agents

INVENTOR(S): Kawazoe, Satoyuki

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2000086439	A2	20000328	JP 1998-264510	19980918

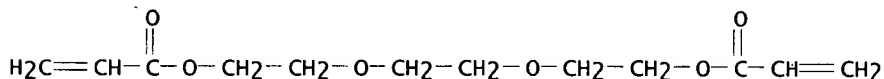
AB The cosmetic gels contain 0.01-10.0 wt.% cationic thickening agents prepd. from monomers CH<sub>2</sub>:CR<sub>1</sub>COABNR<sub>2</sub>R<sub>3</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub>, R<sub>3</sub> = H, C1-4 alkyl; A = O, NH; B = linear or branched C1-4 alkylene) 15-85, CH<sub>2</sub>:CR<sub>1</sub>R<sub>4</sub> (R<sub>1</sub> = same as above; R<sub>4</sub> = Q, CONH<sub>2</sub>; p = 3, 4) 0-80.0, CH<sub>2</sub>:CR<sub>1</sub>COAR<sub>5</sub>R<sub>6</sub> [R<sub>1</sub>, A = same as above; R<sub>5</sub> = linear or branched C1-17 alkylene, (C<sub>n</sub>H<sub>2n</sub>O<sub>n</sub>)<sub>q</sub>; n = 1-4; q = 1-25; R<sub>6</sub> = H, Me] 1.0-60.0, and crosslinking vinyl monomers 0.1-20.0 wt.% and 0.001-5.0 wt.% nonionic polymer thickening agents showing viscosity of 1% aq. soln. (30.degree.) .gtoreq.500 mPa-s. A hair gel (viscosity 12,000 mPa-s at 30.degree.) contg. N,N-dimethylaminoethyl methacrylate -N-vinylpyrrolidone-stearyl acrylate-tripropylene glycol diacrylate copolymer (prepn. given) 1.5, hydroxyethyl cellulose (viscosity of 1% aq. soln. at 30.degree. 6000 mPa-s) 0.001, EtOH 20.0, H<sub>3</sub>PO<sub>4</sub> 0.45, vinylpyrrolidone-vinyl acetate copolymer 3.0, vinylpyrrolidone-dimethylaminoethyl methacrylate copolymer cationic deriv. 5.0, polyoxyethylene-polyoxypropylene decyltetradecyl ether 1.0, perfume 0.1, plant ext., and H<sub>2</sub>O to 100 wt.% was not sticky and spread well on the skin.

IT 160364-67-0P )  
RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(nonsticky cosmetic gels contg. cationic acrylic polymers and nonionic cellulose deriv. as thickening agents)

RN 160364-67-0 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

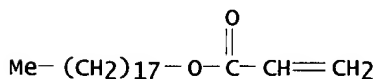
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CMF C15 H24 O6  
CCI IDS  
CDES \*



3 (D1-Me)

CM 2

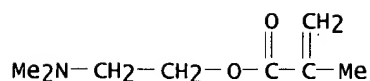
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CMF C21 H40 O2



CM 3

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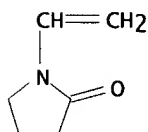
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CM 4

CRN 88-12-0

CMF C6 H9 N O



L36 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:596841 HCAPLUS

DOCUMENT NUMBER: 131:233382

TITLE: Hair-styling compositions containing cationic polymers

INVENTOR(S): Narasaki, Kanji; Kawaguchi, Shigeoki; Ito, Kayo

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 11255622	A2	19990921	JP 1998-75007	19980310
AB	The comps. contain cationic copolymers having the comps. of unsatd. monomers CH <sub>2</sub> :CR <sub>1</sub> COAR <sub>2</sub> N+R <sub>3</sub> R <sub>4</sub> B X- (R <sub>1</sub> = H, Me; R <sub>2</sub> = C <sub>1</sub> -4 alkylene; R <sub>3</sub> , R <sub>4</sub> = H, C <sub>1</sub> -4 alkyl; A = NH, O; X = Br, Cl, I; B = C <sub>1</sub> -12 alkyl, benzyl, C <sub>2</sub> -3 fatty acid C <sub>1</sub> -4 alkyl ester residue) 20-80, unsatd. monomers CH <sub>2</sub> :CR <sub>5</sub> CO <sub>2</sub> E (R <sub>5</sub> = H, Me; E = R <sub>6</sub> OR <sub>7</sub> ; R <sub>6</sub> = C <sub>1</sub> -4 alkylene; R <sub>7</sub> = H, C <sub>1</sub> -4 alkyl) 5-60, (meth)acrylate esters having C <sub>1</sub> -24 (un)satd. aliph. hydrocarbyl 10-70, and other unsatd. monomers 0-20 wt.%. A hair spray contg. 3 wt.% 30:25:15:30 dimethylaminoethyl methacrylate MeCl salt-hydroxyethyl methacrylate-Bu methacrylate-stearyl methacrylate copolymer (wt.-av. mol. wt. 70,000) formed films on the hair to show good shape retention and could be easily removed from the hair by washing.				
IT	244054-97-5P RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair-styling comps. contg. quaternized (meth)acrylate polymers)				
RN	244054-97-5 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-methoxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, compd. with chloromethane (9CI) (CA INDEX NAME)				

CM 1

CRN 74-87-3

CMF C H3 Cl

H<sub>3</sub>C—C1

CM 2

CRN 244054-96-4

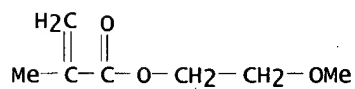
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CCI PMS

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CRN 6976-93-8

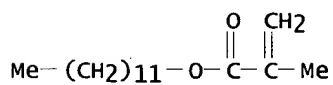
CMF C7 H12 O3



CM 4

CRN 142-90-5

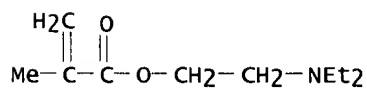
CMF C16 H30 O2



CM 5

CRN 105-16-8

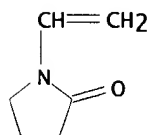
CMF C10 H19 N O2



CM 6

CRN 88-12-0

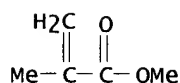
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CM 7

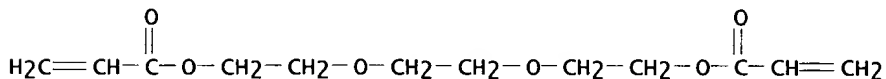
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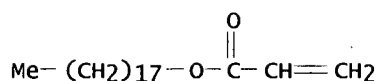
L36 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1999:583117 HCAPLUS  
 DOCUMENT NUMBER: 131:219018  
 TITLE: Thickeners for perfume compositions  
 INVENTOR(S): Tejima, Hiroshi  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 11246382	A2	19990914	JP 1998-71318	19980305
AB	Perfume comps. in the form of liqs. or gels, for application to the skin comprise (1) a cationic thickener, (2) an agent selected from the group consisting of hydroxypropyl cellulose, hydroxyethyl cellulose, Me cellulose, and xanthan gum, (3) perfume components, (4) ethanol, and (5) water. The compn. further comprises powders of polyamides, silica, polyethylene, and/or starch. N,N-dimethylaminoethyl methacrylate-N-vinylpyrrolidone-stearyl acrylate-tripropylene glycol diacrylate copolymer was prepd. A skin compn. was formulated contg. ion-exchanged water 20, perfumes 3.8, the above polymer 0.7, Me cellulose 0.1, lactic acid 0.3, and ethanol q.s. to 100 %.				
IT	160364-67-0P	RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses) (perfume comps. contg. thickeners and powders)			
RN	160364-67-0	HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
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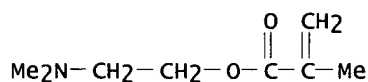
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CM 2  
 CRN 4813-57-4  
 CMF C21 H40 O2



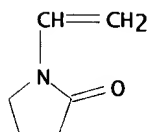
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CM 4

CRN 88-12-0  
CMF C6 H9 N O

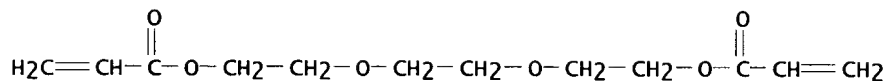


L36 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1998:674797 HCAPLUS  
 DOCUMENT NUMBER: 130:7256  
 TITLE: Hair dyes containing viscosity enhancers  
 INVENTOR(S): Kawazoe, Satoyuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 10279442	A2	19981020	JP 1997-96467	19970331
AB	Hair dyes comprise (1) viscosity-enhancing cationic polymers 0.1-10 %, (2) hair-setting resins 0.5-40 %, and (3) direct dyes 0.005-1 %. A hair gel contained N,N-dimethylaminoethyl methacrylate-N-vinylpyrrolidone-stearyl acrylate-tripropylene glycol diacrylate copolymer 3, dialkylaminoalkyl acrylate copolymer 10, Black No. 401 0.0025, Black No. 403 0.0025, Red. No. 227 0.0025, ethanol 20, phosphoric acid 0.9, polyoxyethylene polyoxypropylene decyl tetradecyl ether 0.1, perfumes 0.1, and distd. water to 100 %.				
IT	186542-81-4P	RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair dyes contg. cationic polymers as viscosity enhancers)			
RN	186542-81-4	HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)				

CM 1

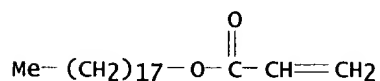
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 CCI IDS  
 CDES \*



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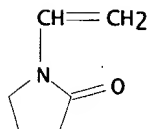
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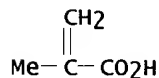
CM 3

CRN 88-12-0  
 CMF C6 H9 N O



CM 4

CRN 79-41-4  
 CMF C4 H6 O2



L36 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1998:653634 HCAPLUS  
 DOCUMENT NUMBER: 129:320973  
 TITLE: Water-in-oil hair emulsion preparations  
 INVENTOR(S): Kawazoe, Tomoyuki; Kaobe, Tetsuya  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:



	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 10265344	A2	19981006	JP 1997-85888	19970319

AB Water-in-oil hair emulsion preps. showing excellent emulsion stability and hair setting activities contain: [A] cationic thickeners, [B] org. compd.-modified clay minerals prepd. from water-swelling clay minerals, quaternary ammonium compds. [cationic surfactants] and hydrophobic surfactants and [C] other ingredients.

IT 160364-67-0P  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(water-in-oil hair emulsion preps.)

RN 160364-67-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

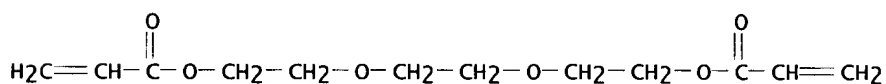
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CRN 42978-66-5

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CCI IDS

CDES \*

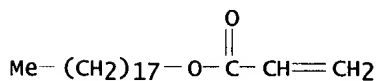


3 ( D1-Me )

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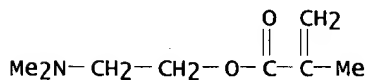
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CM 3

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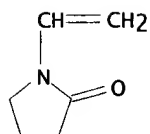
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CM 4

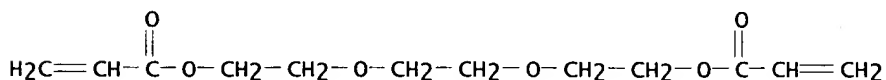
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CMF C6 H9 N O



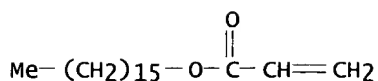
L36 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1998:535172 HCAPLUS  
 DOCUMENT NUMBER: 129:220995  
 TITLE: Hair cosmetics  
 INVENTOR(S): Kawasoe, Satoyuki  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 10218739	A2	19980818	JP 1997-33046	19970131
AB	Nonsticky and nonflaking hair cosmetics are prepd. by adding hydrophilic nonionic surfactants to water-miscible solvents and then adding oily phases to the mixts. to prep. emulsions. Next, the emulsions are mixed with water to form oil-in-water emulsions and then with polymer thickeners to give nonsticky hair cosmetics [e.g. foams and gels].				
IT	212575-95-6	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (hair cosmetics)			
RN	212575-95-6	HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, hexadecyl 2-propenoate and (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	42978-66-5				
CMF	C15 H24 O6				
CCI	IDS				
CDES	*				

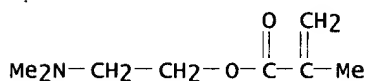


3 (D1-Me)

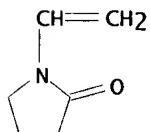
CM 2  
 CRN 13402-02-3  
 CMF C19 H36 O2



CM 3

CRN 2867-47-2  
CMF C8 H15 N O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

L36 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1998:427909 HCAPLUS  
 DOCUMENT NUMBER: 129:140456  
 TITLE: Emulsion-type hair setting compositions  
 INVENTOR(S): Oomura, Takashi  
 PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

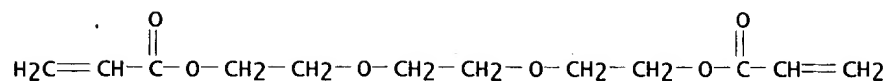
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10175829	A2	19980630	JP 1996-353101	19961213

OTHER SOURCE(S): MARPAT 129:140456  
 AB Emulsion-type hair setting compns. showing excellent setting effects contain: [a] complexes of amphoteric and/or semipolar surfactants with higher fatty acids, [b] cationic thickener polymers and [c] other ingredients.  
 IT 160364-67-0 160364-68-1  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (emulsion-type hair setting compns.)  
 RN 160364-67-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9Ci) (CA INDEX NAME)

CM 1

CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS

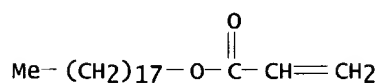
CDES \*



3 (D1-Me)

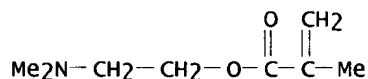
CM 2

CRN 4813-57-4  
CMF C21 H40 O2



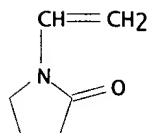
CM 3

CRN 2867-47-2  
CMF C8 H15 N O2



CM 4

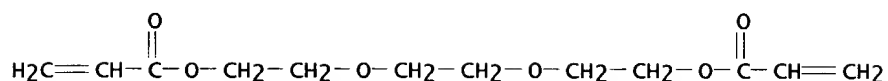
CRN 88-12-0  
CMF C6 H9 N O



RN 160364-68-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

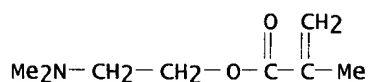
CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS  
CDES \*



3 (D1-Me)

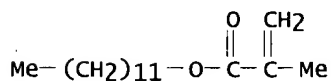
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



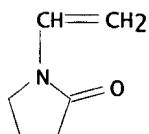
CM 3

CRN 142-90-5  
CMF C16 H30 O2



CM 4

CRN 88-12-0  
CMF C6 H9 N O



L36 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1997:402418 HCAPLUS  
 DOCUMENT NUMBER: 127:34646  
 TITLE: Hair cosmetics containing cationic (meth)acrylic resins  
 INVENTOR(S): Narasaki, Kanji; Kawaguchi, Shigeoki; Ouchi, Shinsuke  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09100315	A2	19970415	JP 1995-259999	19951006

AB Hair cosmetics with good conditioning effect contain a cationic resin prep. from (1) 40-80 wt.% of CH<sub>2</sub>:C(R<sub>1</sub>)COAR2NR3R4

(R1 = H, Me; R2 = C1-4 alkylene; R3, R4 = C1-4 alkyl; A = O, NH), 10-45 wt.% of CH<sub>2</sub>:C(R5)CO<sub>2</sub>R6 (R5 = H, Me; R6 = C1-10 alkyl), 5-40 wt.% of CH<sub>2</sub>:C(R7)CO<sub>2</sub>R8 (R7 = H, Me; R8 = C12-24 alkyl or alkenyl), 5-30 wt.% of CH<sub>2</sub>:C(R9)CO(D)MOR10 (R9 = H, Me; D = C2-4 oxyalkylene; m = 3-50; R10 = H, C1-4 alkyl, phenyl), 0-25 wt.% of other monomers, and cationizing agent XB (X = Br, Cl, I, C1-4 alkyl sulfate residue; B = C1-12 alkyl, benzyl, residue of C1-4 alkyl ester of C1-3 aliph. carboxylic acid). The cationic resins have wt.-av. mol. wt. 5,000-500,000. Hair sprays and hair mousses contg. such polymers were formulated.

IT 190453-80-6P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(cationic (meth)acrylic resins for hair cosmetics)

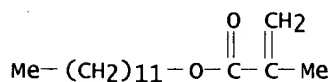
RN 190453-80-6 HCAPLUS

CN Ethanaminium, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethyl sulfate, polymer with butyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, methyl 2-methyl-2-propenoate and methyloxirane block polymer with oxirane mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 142-90-5

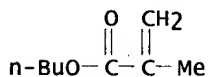
CMF C16 H30 O2



CM 2

CRN 97-88-1

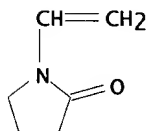
CMF C8 H14 O2



CM 3

CRN 88-12-0

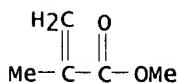
CMF C6 H9 N O



CM 4

CRN 80-62-6

CMF C5 H8 O2

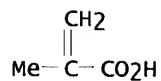


CM 5

CRN 115426-96-5  
 CMF C4 H6 O2 . (C3 H6 O . C2 H4 O)x  
 CDES 8:GD,ESTER

CM 6

CRN 79-41-4  
 CMF C4 H6 O2

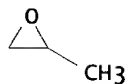


CM 7

CRN 106392-12-5  
 CMF (C3 H6 O . C2 H4 O)x  
 CCI PMS  
 CDES 8:PM,BLOCK

CM 8

CRN 75-56-9  
 CMF C3 H6 O



CM 9

CRN 75-21-8  
 CMF C2 H4 O

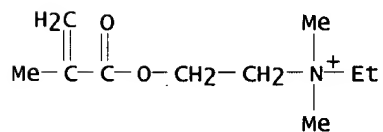


CM 10

CRN 13223-03-5  
 CMF C10 H20 N O2 . C2 H5 O4 S

CM 11

CRN 48063-69-0  
 CMF C10 H20 N O2



CM 12

CRN 48028-76-8

CMF C2 H5 O4 S

Et-O-SO<sub>3</sub><sup>-</sup>

L36 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:262165 HCAPLUS

DOCUMENT NUMBER: 126:242589

TITLE: Hair preparations containing cationic copolymers

INVENTOR(S): Narasaki, Kanji; Kawaguchi, Shigeoki; Oochi, Shinsuke

PATENT ASSIGNEE(S): Mitsubishi Chem Corp, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

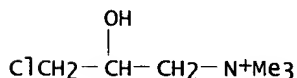
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 09040532	A2	19970210	JP 1995-197516	19950802
AB	Hair preps. with excellent conditioning effects contain cationic copolymers having av. mol wt. 5000-500,000 and contg. .gtoreq.5% cationic group-contg. acrylic monomers. As an example, a hair spray contained the cationic copolymer 5, water 65 and ethanol 30 wt. parts.				
IT	188565-91-5P	RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair preps. contg. cationic copolymers)			
RN	188565-91-5	HCAPLUS			
CN	1-Propanaminium, 3-chloro-2-hydroxy-N,N,N-trimethyl-, chloride, compd. with 2-(dimethylamino)ethyl 2-methyl-2-propenoate polymer with 1-ethenyl-2-pyrrolidinone, 2-ethylhexyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)				

CM 1

CRN 82914-58-7

CMF C6 H15 Cl N O



CM 2

CRN 188565-90-4

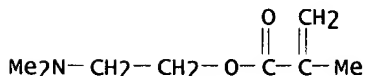
CMF (C12 H22 O2 . C8 H15 N O2 . C6 H9 N O . C5 H8 O2)x

CCI PMS

CM 3

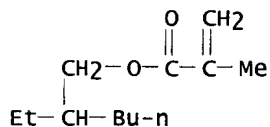
CRN 2867-47-2

CMF C8 H15 N O2

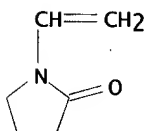




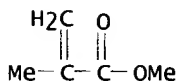
CM 4

CRN 688-84-6  
CMF C12 H22 O2

CM 5

CRN 88-12-0  
CMF C6 H9 N O

CM 6

CRN 80-62-6  
CMF C5 H8 O2

L36 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1997:204474 HCAPLUS  
 DOCUMENT NUMBER: 126:190732  
 TITLE: Cationic polymers as bases for hair  
 -styling preparations  
 INVENTOR(S): Uchama, Jujiro  
 PATENT ASSIGNEE(S): Osaka Juki Kagaku Kogyo Kk, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09002921	A2	19970107	JP 1995-151675	19950619
JP 3076221	B2	20000814		

AB Copolymers of 20-55 wt.% monomer (A) CH<sub>2</sub>:CR<sub>1</sub>CO<sub>2</sub>R<sub>2</sub>N+Me<sub>2</sub>Et.EtSO<sub>4</sub>- (I; R<sub>1</sub> = H, Me; R<sub>2</sub> = C<sub>1</sub>-3 alkylene) with 45-80 wt.% monomer (B) CH<sub>2</sub>:CR<sub>2</sub>COR<sub>4</sub> [R<sub>3</sub> = H, Me; R<sub>4</sub> = OR<sub>5</sub> (R<sub>5</sub> = C<sub>1</sub>-4 alkyl), NHCMe<sub>3</sub>] as bases for hair -styling preps are claimed. The copolymer may addnl. contain an ethylenic monomer (C). The copolymers show good miscibility with natural gas, pH stability, water-soly., and high hair-setting property even under high humidity, and are useful for hair blowing agents, hair lotions, hair liqs., hair mousse, hair cream., etc., esp. in aerosol forms. A

hair spray contg. a mixt. of H<sub>2</sub>O, EtOH, and a copolymer of I (R<sub>1</sub> = Me, R<sub>2</sub> = CH<sub>2</sub>CH<sub>2</sub>) 45, iso-Bu methacrylate 30, and tert-Bu methacrylate 25 parts showed good hair curl retention property and was easily washed out by shampooing.

IT 187476-27-3P 187671-11-0P

RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified);

BIOL (Biological study); PREP (Preparation); USES (Uses)

(cationic polymers composed of dimethylaminoalkyl acrylate di-Et sulfates and acrylic monomers as bases for hair-styling preps.)

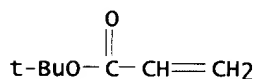
RN 187476-27-3 HCAPLUS

CN Ethanaminium, N-ethyl-N,N-dimethyl-2-[(1-oxo-2-propenyl)oxy]-, ethyl sulfate, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, ethyl 2-propenoate, 2-hydroxypropyl 2-propenoate and 2-methylpropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

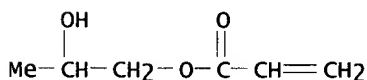
CMF C7 H12 O2



CM 2

CRN 999-61-1

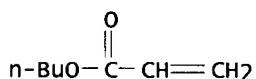
CMF C6 H10 O3



CM 3

CRN 141-32-2

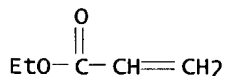
CMF C7 H12 O2



CM 4

CRN 140-88-5

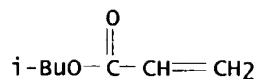
CMF C5 H8 O2



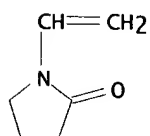
CM 5

CRN 106-63-8

CMF C7 H12 O2



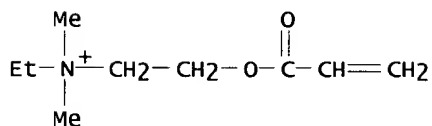
CM 6

CRN 88-12-0  
CMF C6 H9 N O

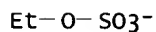
CM 7

CRN 125938-70-7  
CMF C9 H18 N O2 . C2 H5 O4 S

CM 8

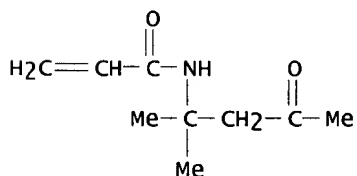
CRN 109180-04-3  
CMF C9 H18 N O2

CM 9

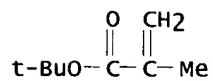
CRN 48028-76-8  
CMF C2 H5 O4 S

RN 187671-11-0 HCAPLUS  
CN Ethanaminium, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethyl sulfate, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 1-ethenyl-2-pyrrolidinone, 2-methyl-2-propenoic acid and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

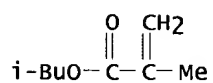
CM 1

CRN 2873-97-4  
CMF C9 H15 N O2

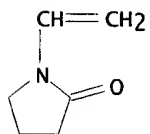
CM 2

CRN 585-07-9  
CMF C8 H14 O2

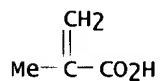
CM 3

CRN 97-86-9  
CMF C8 H14 O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

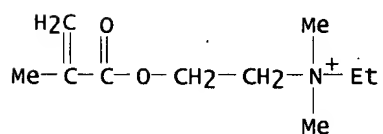
CM 5

CRN 79-41-4  
CMF C4 H6 O2

CM 6

CRN 13223-03-5  
CMF C10 H20 N O2 . C2 H5 O4 S

CM 7

CRN 48063-69-0  
CMF C10 H20 N O2

CM 8

CRN 48028-76-8  
CMF C2 H5 04 SEt- O- SO<sub>3</sub><sup>-</sup>

L36 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:185118 HCAPLUS

DOCUMENT NUMBER: 126:268313

TITLE: Cosmetic compositions containing  
cationic polymer thickeners

INVENTOR(S): Uchiyama, Yujiro; Matsumoto, Junichi; Okuda, Yoshihiro

PATENT ASSIGNEE(S): Osaka Yuki Kagaku Kogyo Kabushiki Kaisha, Japan

SOURCE: U.S., 17 pp. Cont.-in-part of U.S. Ser. No. 255,729,  
abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5608021	A	19970304	US 1995-420668	19950412
PRIORITY APPLN. INFO.:			US 1993-158284	B2 19931129
			US 1994-255729	B2 19940607

AB Cationic thickeners are prepd. by polymg. a monomer compn. comprising 15 to 85% by wt. of at least one of acrylic monomer or methacrylic monomer having an amino group, 20 to 80% by wt. of vinyl monomer, 1 to 20% by wt. of monomer having at least one of acryloyl group and methacryloyl group and 0.1 to 20% by wt. of crosslinkable vinyl monomer (Markush structure given). This cationic thickeners contain little impurities, and can be easily mixed with a cationic polymer for setting, and forms a flexible film after drying. N,N-dimethylaminoethyl methacrylate 39, N-vinylpyrrolidone 58.5, methoxypolyethyleneglycol(23)methacrylate 2.5, ethylene glycol dimethacrylate 2 g, and a mixt. of 33.4 g ethanol and 464.6 g cyclohexane were stirred and refluxed at 80.degree. for 2 h under N. Then 0.3 g of 2,2'-azobisisobutyronitrile was added to the mixt. to initiate the polymn. at 80.degree. and the polymn. was carried out for 10 h. The polymer thus obtained was filtered sepd., and dried. The viscosity of an aq. soln. of 2% polymer was 41,000cP and the feel, appearance, flexibility and the gloss of a film formed from the aq. soln. was studied.

IT 150265-74-0P 150265-75-1P 150265-76-2P  
150291-89-7P 150291-90-0P 168695-46-3P  
188685-01-0P 188685-06-5P 188685-07-6P

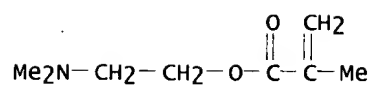
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(cosmetic compns. contg. cationic polymer thickeners)

RN 150265-74-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

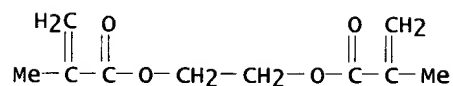
CRN 2867-47-2  
CMF C8 H15 N O2



CM 2

CRN 97-90-5

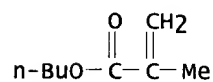
CMF C10 H14 O4



CM 3

CRN 97-88-1

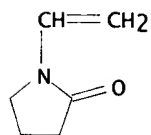
CMF C8 H14 O2



CM 4

CRN 88-12-0

CMF C6 H9 N O



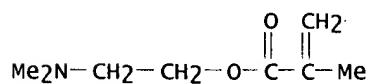
RN 150265-75-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1,1-dimethylethyl  
 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

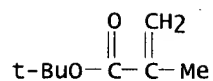
CMF C8 H15 N O2



CM 2

CRN 585-07-9

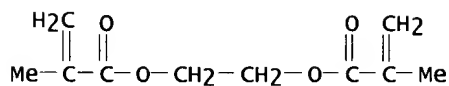
CMF C8 H14 O2



CM 3

CRN 97-90-5

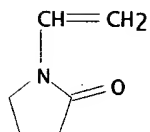
CMF C10 H14 O4



CM 4

CRN 88-12-0

CMF C6 H9 N O



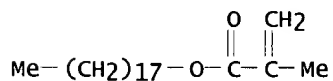
RN 150265-76-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone  
and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

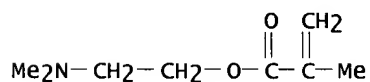
CMF C22 H42 O2



CM 2

CRN 2867-47-2

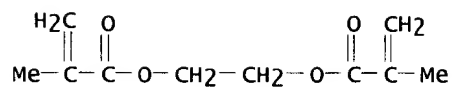
CMF C8 H15 N O2



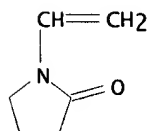
CM 3

CRN 97-90-5

CMF C10 H14 O4

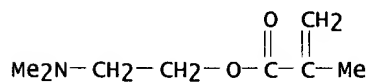


CM 4

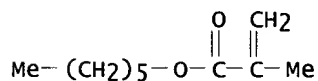
CRN 88-12-0  
CMF C6 H9 N O

RN 150291-89-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone  
and hexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

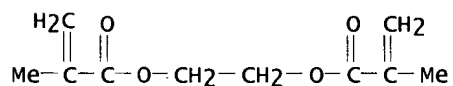
CM 1

CRN 2867-47-2  
CMF C8 H15 N O2

CM 2

CRN 142-09-6  
CMF C10 H18 O2

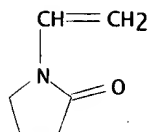
CM 3

CRN 97-90-5  
CMF C10 H14 O4

CM 4

CRN 88-12-0  
CMF C6 H9 N O

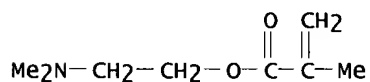




RN 150291-90-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
 2-(dimethylamino)ethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-  
 propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

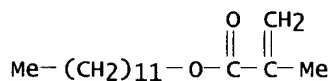
CM 1

CRN 2867-47-2  
 CMF C8 H15 N O2



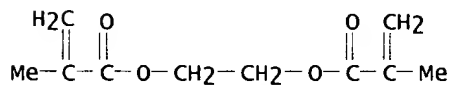
CM 2

CRN 142-90-5  
 CMF C16 H30 O2



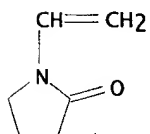
CM 3

CRN 97-90-5  
 CMF C10 H14 O4



CM 4

CRN 88-12-0  
 CMF C6 H9 N O



RN 168695-46-3 HCAPLUS  
 CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]  
 ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide,  
 1-ethenyl-2-pyrrolidinone and octadecyl 2-propenoate (9CI) (CA INDEX  
 NAME)

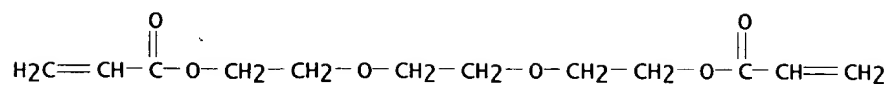
CM 1

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS

CDES \*

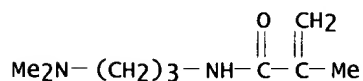


3 ( D1-Me )

CM 2

CRN 5205-93-6

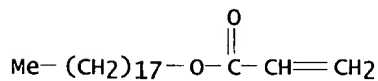
CMF C9 H18 N2 O



CM 3

CRN 4813-57-4

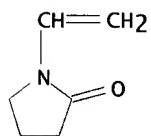
CMF C21 H40 O2



CM 4

CRN 88-12-0

CMF C6 H9 N O



RN 188685-01-0 HCAPLUS

CN 2-Propenoic acid, (1-methyl-1,2-ethanediy1)bis[oxy(methyl-2,1-ethanediy1)]  
 ester, polymer with N-[2-(dimethylamino)ethyl]-2-methyl-2-propenamide,  
 1-ethenyl-2-pyrrolidinone and octadecyl 2-propenoate (9CI) (CA INDEX  
 NAME)

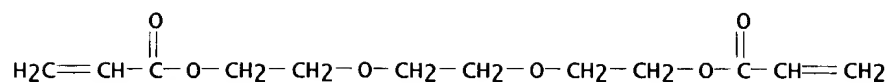
CM 1

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS

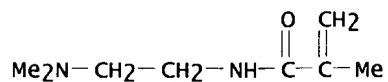
CDES \*



3 ( D1-Me )

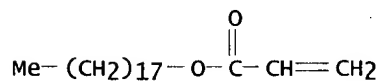
CM 2

CRN 13081-44-2  
CMF C8 H16 N2 O



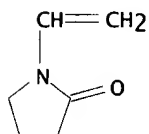
CM 3

CRN 4813-57-4  
CMF C21 H40 O2



CM 4

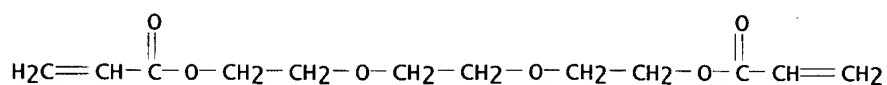
CRN 88-12-0  
CMF C6 H9 N O



RN 188685-06-5 HCAPLUS  
CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]  
ester, polymer with N-[2-(dimethylamino)ethyl]-2-methyl-2-propenamide,  
dodecyl 2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

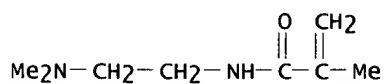
CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS  
CDES \*



3 ( D1-Me )

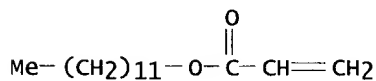
CM 2

CRN 13081-44-2  
CMF C8 H16 N2 O



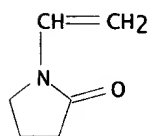
CM 3

CRN 2156-97-0  
CMF C15 H28 O2



CM 4

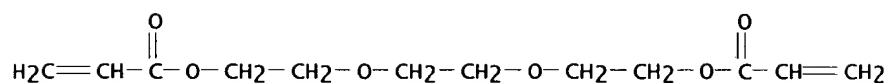
CRN 88-12-0  
CMF C6 H9 N O



RN 188685-07-6 HCAPLUS  
CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]  
ester, polymer with butyl 2-propenoate, N-[2-(dimethylamino)ethyl]-2-  
methyl-2-propenamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

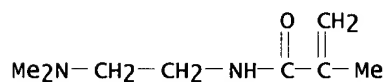
CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS  
CDES \*



3 ( D1-Me )

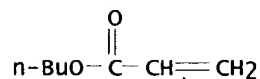
CM 2

CRN 13081-44-2  
CMF C8 H16 N2 O



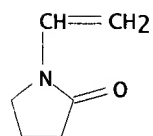
CM 3

CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 88-12-0  
CMF C6 H9 N O



L36 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1997:140358 HCAPLUS  
 DOCUMENT NUMBER: 126:176680  
 TITLE: Cosmetic composition comprising  
 cationic polymer thickener  
 INVENTOR(S): Matsumoto, Junichi; Uchiyama, Yujiro; Kambe, Tetsuya;  
 Nanba, Tomiyuki; Okuda, Yoshihiro  
 PATENT ASSIGNEE(S): Osaka Yuki Kagaku Kogyo Kabushiki Kaisha, Japan;  
 Shiseido Co., Ltd.  
 SOURCE: U.S., 28 pp., Cont.-in-part of U.S. Ser. No. 158,284,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5603926 A 19970218 US 1994-354833 19941208  
 PRIORITY APPLN. INFO.: JP 1992-321872 A 19921201  
 US 1993-158284 B2 19931129

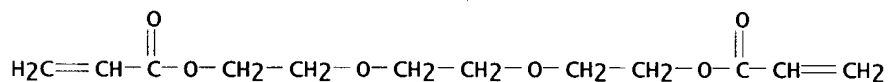
AB Cosmetic compns. comprise cationic thickeners prepd. in a nonaq. system in the absence of a surface-active agent by polymg. monomer compn. contg. 15-90 % of at least one of (meth)acrylic monomer having amino group, 0-80 % of vinyl monomer, 1-60 % of monomer having at least one of (meth)acryloyl group, and 0.1-25 % of crosslinkable vinyl monomer. This cosmetic compn. imparts refreshing feeling and little skin irritation and can be suitably used as hair cream, hair lotion and the like. N,N-dimethylaminoethyl methacrylate-N-vinylpyrrolidone-stearyl acrylate-tripropylene glycol diacrylate (50:47.5:2.5:5.7 wt. ratio) copolymer was prepd. in a mixt. of ethanol and cyclohexane (23.1:554.3 wt. ratio) as a cationic thickener. A milk lotion contg. 1 part of the thickener was formulated.

IT 160364-67-0P 160364-68-1P 168695-46-3P  
 187266-52-0P 187266-53-1P  
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of cationic polymers as thickeners for cosmetics)

RN 160364-67-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

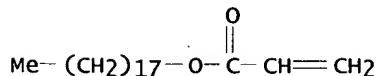
CRN 42978-66-5  
 CMF C15 H24 O6  
 CCI IDS  
 CDES \*



3 ( D1-Me )

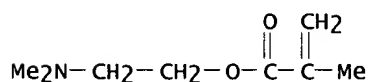
CM 2

CRN 4813-57-4  
 CMF C21 H40 O2

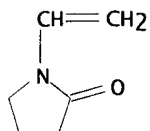


CM 3

CRN 2867-47-2  
 CMF C8 H15 N O2

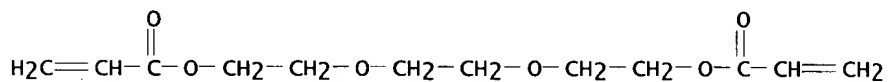


CM 4

CRN 88-12-0  
CMF C6 H9 N O

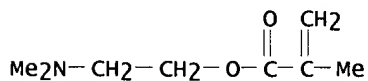
RN 160364-68-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

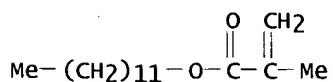
CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS  
CDES \*

3 ( D1-Me )

CM 2

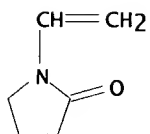
CRN 2867-47-2  
CMF C8 H15 N O2

CM 3

CRN 142-90-5  
CMF C16 H30 O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O



RN 168695-46-3 HCAPLUS  
 CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]  
 ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide,  
 1-ethenyl-2-pyrrolidinone and octadecyl 2-propenoate (9CI) (CA INDEX  
 NAME)

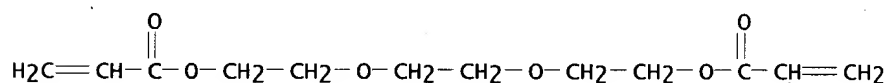
CM 1

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS

CDES \*

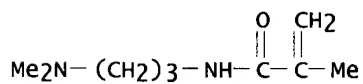


3 ( D1-Me )

CM 2

CRN 5205-93-6

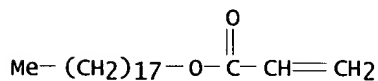
CMF C9 H18 N2 O



CM 3

CRN 4813-57-4

CMF C21 H40 O2

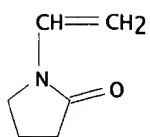


CM 4

CRN 88-12-0

CMF C6 H9 N O





RN 187266-52-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with  
 dodecyl 2-propenoate, 1-ethenyl-2-pyrrolidinone and (1-methyl-1,2-  
 ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate (9CI) (CA  
 INDEX NAME)

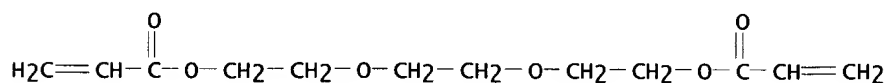
CM 1

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS

CDES \*

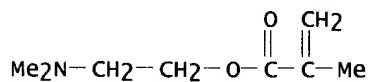


3 ( D1-Me )

CM 2

CRN 2867-47-2

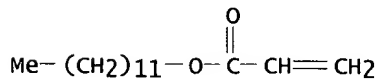
CMF C8 H15 N O2



CM 3

CRN 2156-97-0

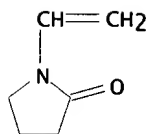
CMF C15 H28 O2



CM 4

CRN 88-12-0

CMF C6 H9 N O



RN 187266-53-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone and (1-methyl-1,2-ethanediyl)bis[oxymethyl-2,1-ethanediyl] di-2-propenoate (9CI) (CA INDEX NAME)

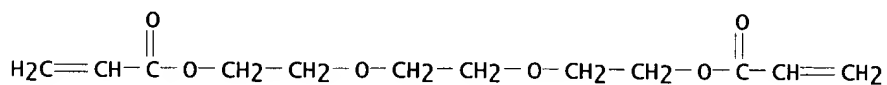
CM 1

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS

CDES \*

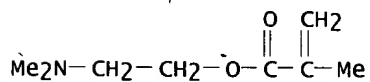


3 ( D1-Me )

CM 2

CRN 2867-47-2

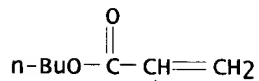
CMF C8 H15 N O2



CM 3

CRN 141-32-2

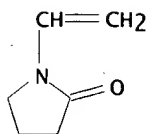
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CM 4

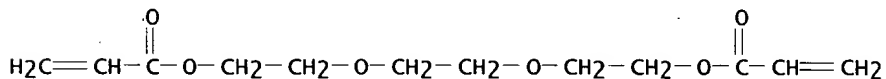
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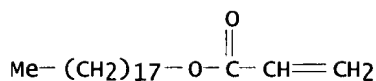
L36 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1996:756356 HCAPLUS  
 DOCUMENT NUMBER: 126:36859  
 TITLE: Cosmetics containing UV absorbents,  
 cationic thickeners and ethanol for sunburn  
 prevention  
 INVENTOR(S): Hanada, Takuya; Kurosawa, Takafumi  
 PATENT ASSIGNEE(S): Shiseido Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 08268857	A2	19961015	JP 1995-100350	19950331
AB	Nonirritating cosmetics effective for sunburn prevention contain UV absorbents 0.01-20.0, cationic thickeners 0.05-10.0 and ethanol 30.0-90.0 wt.%. A cosmetic contained ethanol 50.0, octylmethoxycinnamate 4.0, cationic thickener 1.0, phosphoric acid 0.3, and silica 1.0 in addn. to other ingredients.				
IT	160364-67-0 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (cosmetics contg. UV absorbents, cationic thickeners and ethanol for sunburn prevention)				
RN	160364-67-0 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	42978-66-5				
CMF	C15 H24 O6				
CCI	IDS				
CDES	*				



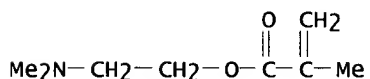
3 (D1-Me)

CM 2  
 CRN 4813-57-4  
 CMF C21 H40 O2



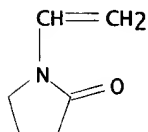
CM 3

CRN 2867-47-2  
CMF C8 H15 N O2



CM 4

CRN 88-12-0  
CMF C6 H9 N O



L36 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:392121 HCAPLUS

DOCUMENT NUMBER: 125:115502

TITLE: Homogeneous polymerization process for making substantially homogeneous terpolymers

INVENTOR(S): Liu, Kou-Chang; Login, Robert B.; Reuven, Yakir; Bees, Janice K.

PATENT ASSIGNEE(S): ISP Investments Inc., USA; Helene Curtis, Inc.

SOURCE: U.S., 7 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5523369	A	19960604	US 1994-365257	19941228
CA 2203401	AA	19960704	CA 1995-2203401	19951227
WO 9619966	A1	19960704	WO 1995-US16891	19951227
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9646089	A1	19960719	AU 1996-46089	19951227
AU 703824	B2	19990401		
EP 805671	A1	19971112	EP 1995-944239	19951227
R: CH, DE, ES, FR, GB, LI				
CN 1171044	A	19980121	CN 1995-197086	19951227
JP 11500417	T2	19990112	JP 1995-520581	19951227
US 5997855	A	19991207	US 1998-14465	19980128
PRIORITY APPLN. INFO.:			US 1994-365257	A 19941228

US 1994-365258 A2 19941228  
 US 1994-365259 A2 19941228  
 US 1994-365720 A 19941228  
 WO 1995-US16891 W 19951227

AB A homogeneous polymn. process is described for making substantially homogeneous terpolymers of, by wt., 55-99%, preferably 65-95% of vinyl lactam, preferable vinylpyrrolidone; 0.5-49%, preferably 1-25% of a quaternary amino monomer, preferably 3-methacrylamidopropyltrimethylammonium chloride; and 0.5-49%, preferably 1-25%, of a hydrophobic monomer, preferably octadecyl methacrylate. In the process the latter 2 monomers are added to the polymn. mixt. according to an equation that provides a feed schedule assuring that the rate of disappearance of the vinyl lactam during the polymn. is substantially matched by the rate of disappearance of the slower reacting monomers. The homogeneous terpolymer provides dual hair styling and conditioning functions in hair care applications.

IT 175018-12-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(homogeneous polymn. for making homogeneous quaternary ammonium polymers for hair care compns.)

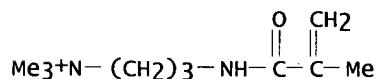
RN 175018-12-9 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 1-ethenyl-2-pyrrolidinone and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 51410-72-1

CMF C10 H21 N2 O . C1

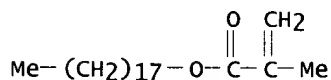


O C1-

CM 2

CRN 32360-05-7

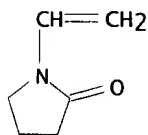
CMF C22 H42 O2



CM 3

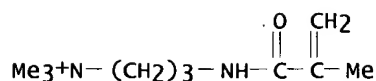
CRN 88-12-0

CMF C6 H9 N O



L36 ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1996:172231 HCAPLUS  
 DOCUMENT NUMBER: 124:233452  
 TITLE: Homogeneous polymerization process for making  
 terpolymers of vinyl lactam, an organic quaternary  
 ammonium monomer and a hydrophobic monomer  
 INVENTOR(S): Liu, Kou Chang; Login, Robert B.; Reuven, Yakir  
 PATENT ASSIGNEE(S): Isp Investments Inc., USA  
 SOURCE: U.S., 7 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5492988	A	19960220	US 1994-365260	19941228
WO 9620227	A1	19960704	WO 1995-US16127	19951213
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9644216	A1	19960719	AU 1996-44216	19951213
AU 700245	B2	19981224		
EP 800540	A1	19971015	EP 1995-943076	19951213
R: CH, DE, ES, FR, GB, LI				
CN 1171120	A	19980121	CN 1995-197087	19951213
JP 10511422	T2	19981104	JP 1995-520476	19951213
PRIORITY APPLN. INFO.:				
			US 1994-365260	19941228
			US 1994-365525	19941228
			WO 1995-US16127	19951213
AB	Homogeneous terpolymers of, 55-99%, preferably 65-95% of a vinyl lactam, preferably vinyl pyrrolidone; 0.5-49% of a quaternary amino monomer, preferably 3-methacrylamidopropyl trimethylammonium chloride; and 0.5-49% of a hydrophobic monomer, preferably octadecyl methacrylate are prep'd by polymn. of the monomers in a solvent in the presence of a radical initiator, by (a) pre-charging a reactor with a predetd. amt. of the vinyl lactam, and solvent, at a suitable polymn. temp., and (b) introducing the quaternary amino monomer and the hydrophobic monomer incrementally into the reactor in predetd. rates corresponding to the rate of disappearance of the vinyl lactam, over a given period of time. The homogeneous terpolymer provides dual hair styling and conditioning functions in hair care applications.			
IT	175018-12-9P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (homogeneous polymn. process for making terpolymers of vinyl pyrrolidone, an org. quaternary ammonium monomer and a hydrophobic monomer)			
RN	175018-12-9 HCAPLUS			
CN	1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 1-ethenyl-2-pyrrolidinone and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)			
CM	1			
CRN	51410-72-1			
CMF	C10 H21 N2 O . C1			

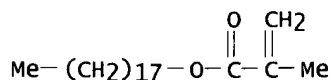


O C1-

CM 2

CRN 32360-05-7

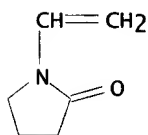
CMF C22 H42 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



L36 ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:842732 HCAPLUS

DOCUMENT NUMBER: 123:237518

TITLE: Cosmetic compositions comprising cationic thickeners

INVENTOR(S): Matsumoto, Junichi; Uchiyama, Yujiro; Kambe, Tetsuya; Nanba, Tomiyuki

PATENT ASSIGNEE(S): Osaka Yuki Kagaku Kogyo KK, Japan; Shiseido Co., Ltd.

SOURCE: Eur. Pat. Appl., 52 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 671157	A1	19950913	EP 1994-103241	19940304
EP 671157	B1	20000913		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 196245	E	20000915	AT 1994-103241	19940304
PRIORITY APPLN. INFO.:				
			JP 1992-321872	A 19921201
			EP 1994-103241	A 19940304

AB Cosmetic compns. comprise cationic thickeners prepd. by polymg. monomer compns. contg. 15 to 90% by wt. of at least one of acrylic monomer having amino group and methacrylic monomer having amino group, 0 to 80% by wt. of vinyl monomer, 1 to 60% by wt. of monomer having at least one of acryloyl group and methacryloyl group and 0.1 to 25% by wt. of crosslinkable vinyl monomer. This cosmetic compn. imparts refreshing feeling and little skin irritation and can be suitably used as hair cream, hair lotion and the like. For

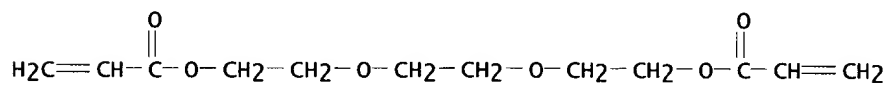
example, N,N-dimethylaminoethyl methacrylate-N-vinylpyrrolidone-stearyl acrylate-tripropylene glycol diacrylate copolymer was prepd. and used for formulating hair preps. and skin preps.

IT 160364-67-0P 160364-68-1P 168695-46-3P  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cationic thickeners for cosmetics)

RN 160364-67-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

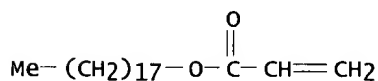
CRN 42978-66-5  
 CMF C15 H24 O6  
 CCI IDS  
 CDES \*



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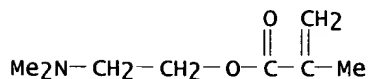
CM 2

CRN 4813-57-4  
 CMF C21 H40 O2



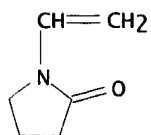
CM 3

CRN 2867-47-2  
 CMF C8 H15 N O2



CM 4

CRN 88-12-0  
 CMF C6 H9 N O

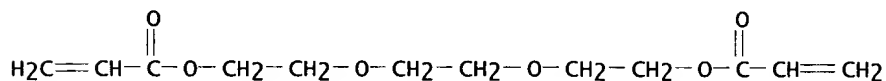




RN 160364-68-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

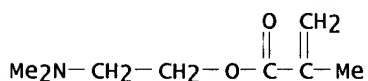
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 CCI IDS  
 CDES \*



3 ( D1-Me )

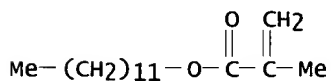
CM 2

CRN 2867-47-2  
 CMF C8 H15 N O2



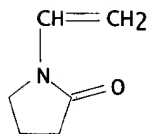
CM 3

CRN 142-90-5  
 CMF C16 H30 O2



CM 4

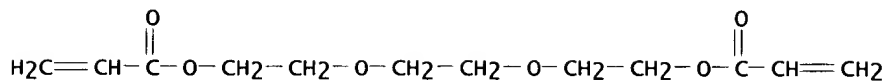
CRN 88-12-0  
 CMF C6 H9 N O



RN 168695-46-3 HCAPLUS  
 CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1-ethenyl-2-pyrrolidinone and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

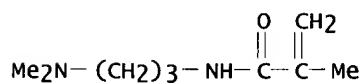
CRN 42978-66-5  
 CMF C15 H24 O6  
 CCI IDS  
 CDES \*



3 ( D1-Me )

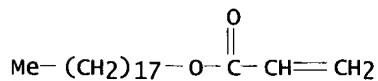
CM 2

CRN 5205-93-6  
 CMF C9 H18 N2 O



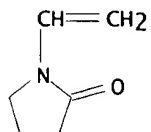
CM 3

CRN 4813-57-4  
 CMF C21 H40 O2



CM 4

CRN 88-12-0  
 CMF C6 H9 N O



L36 ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1995:435901 HCAPLUS  
 DOCUMENT NUMBER: 122:222450  
 TITLE: Preparation of cationic thickeners for cosmetics  
 INVENTOR(S): Uchama, Jujiro; Matsumoto, Junichi  
 PATENT ASSIGNEE(S): Osaka Juki Kagaku Kogyo Kk, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06316510	A2	19941115	JP 1994-75138	19940413
JP 3032113	B2	20000410		

GI For diagram(s), see printed CA Issue.

AB Cationic thickeners, useful for cosmetics and fragrant compns., are prepd. by polymn. of CH<sub>2</sub>:CR<sub>1</sub>COABNR<sub>2</sub>R<sub>3</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub>, R<sub>3</sub> = H, Me, Et, CMe<sub>3</sub>; A = O, NH; B = linear or branched C1-4 alkylene) 15-85, CH<sub>2</sub>:CR<sub>1</sub>R<sub>4</sub> (R<sub>1</sub> = same as above; R<sub>4</sub> = Q, CONH<sub>2</sub>; p = 3, 4) 0-80, CH<sub>2</sub>:CR<sub>1</sub>COAR<sub>5</sub>R<sub>6</sub> [R<sub>1</sub>, A = same as above; R<sub>5</sub> = C1-17 linear or branched alkylene, (C<sub>2</sub>H<sub>4</sub>)<sub>q</sub>, (C<sub>3</sub>H<sub>6</sub>)<sub>r</sub>; q, r = 1-25; R<sub>6</sub> = H, Me] 1-60, and crosslinkable vinyl monomers 0.1-20% in nonaq. solvents by heating under inert gas, followed by powdering the reaction solns. N,N-dimethylaminoethyl methacrylate 39, N-vinylpyrrolidone 58.5, methoxypolyethylene glycol methacrylate 2.5, ethylene glycol dimethacrylate 2, and AIBN 0.3 g were refluxed in EtOH-cyclohexane mixt. at 80.degree. under N for .apprx.10 h, condensed, dried, and pulverized to give cationic thickener (41,000 cP, in 2% aq. soln.), which was mixed with hair-setting polymers to form a hair prepn.

IT 150265-74-0P 150265-75-1P 150265-76-2P

150291-89-7P 150291-90-0P

RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of poly(meth)acrylates as thickeners for cosmetic and fragrance compns.)

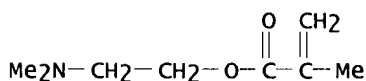
RN 150265-74-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

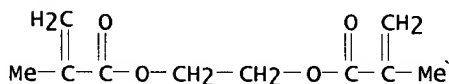
CMF C8 H15 N O2



CM 2

CRN 97-90-5

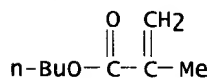
CMF C10 H14 O4



CM 3

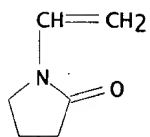
CRN 97-88-1

CMF C8 H14 O2



CM 4

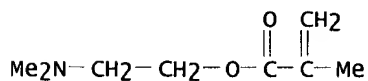
CRN 88-12-0  
CMF C6 H9 N O



RN 150265-75-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1,1-dimethylethyl  
2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

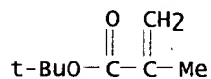
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CRN 2867-47-2  
CMF C8 H15 N O2



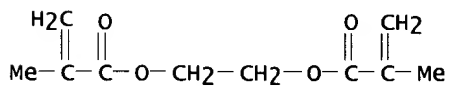
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CRN 585-07-9  
CMF C8 H14 O2



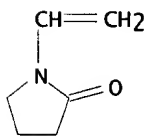
CM 3

CRN 97-90-5  
CMF C10 H14 O4



CM 4

CRN 88-12-0  
CMF C6 H9 N O

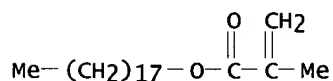


RN 150265-76-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone  
and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

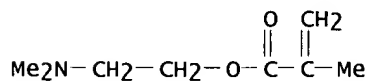
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



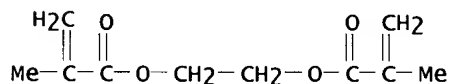
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



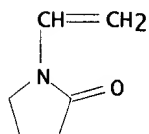
CM 3

CRN 97-90-5  
CMF C10 H14 O4



CM 4

CRN 88-12-0  
CMF C6 H9 N O

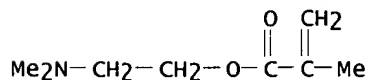


RN 150291-89-7 HCAPLUS

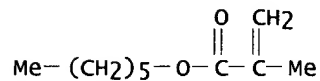
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone  
and hexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

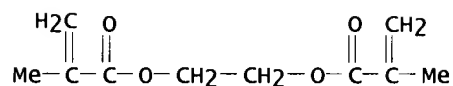
CRN 2867-47-2  
CMF C8 H15 N O2



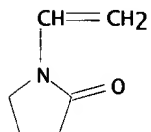
CM 2

CRN 142-09-6  
CMF C10 H18 O2

CM 3

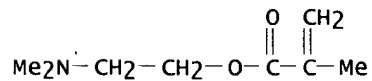
CRN 97-90-5  
CMF C10 H14 O4

CM 4

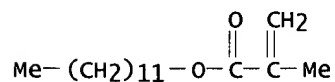
CRN 88-12-0  
CMF C6 H9 N O

RN 150291-90-0 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-  
propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

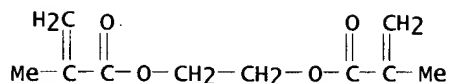
CM 1

CRN 2867-47-2  
CMF C8 H15 N O2

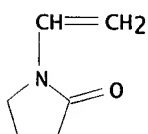
CM 2

CRN 142-90-5  
CMF C16 H30 O2

CM 3

CRN 97-90-5  
CMF C10 H14 O4

CM 4

CRN 88-12-0  
CMF C6 H9 N O

L36 ANSWER 22 OF 27. HCAPLUS. COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:297666 HCAPLUS

DOCUMENT NUMBER: 122:63981

TITLE: hair preparations containing  
cationic thickenersINVENTOR(S): Matsumoto, Junichi; Uchama, Jujiro; Kanbe, Tetsuya;  
Nanba, TomyukiPATENT ASSIGNEE(S): Osaka Juki Kogaku Kogyo K. K., Japan; Shiseido Co.,  
Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06219921	A2	19940809	JP 1993-298659	19931129
PRIORITY APPLN. INFO.:			JP 1992-321872	A 19921201

AB Hair preps. (hair creams or lotions) comprising acrylic copolymers prepd. from a mixt. contg. amine-contg. (meth)acrylic acid monomers 15-90, vinyl monomers 0-80, (meth)acryloyl monomers 1-60wt.% as cationic thickeners show low skin irritancy and give good feels. Thus, a hair lotion contained a cationic thickener 0.3, propylene glycol 4.0, PEG 1500 2.0, polyoxtethylenre oleyl ether 2.5, ethanol 15.0, purified water 76.7 g, and perfumes (final pH = 5.5).

IT 160364-67-0P 160364-68-1P 160364-70-5P  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(hair preps. contg. acrylic copolymers as cationic thickeners)

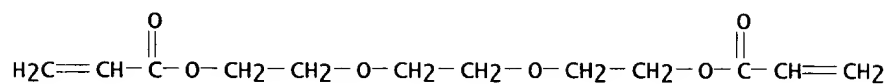
RN 160364-67-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanedyl)bis[oxy(methyl-2,1-ethanedyl)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

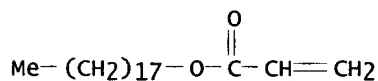
CRN 42978-66-5

CMF C15 H24 O6  
 CCI IDS  
 CDES \*

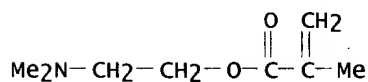


3 ( D1-Me )

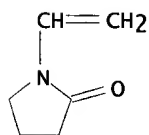
CM 2  
 CRN 4813-57-4  
 CMF C21 H40 O2



CM 3  
 CRN 2867-47-2  
 CMF C8 H15 N O2



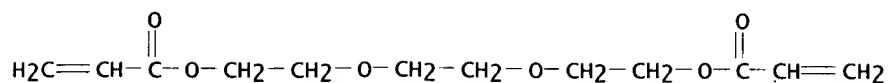
CM 4  
 CRN 88-12-0  
 CMF C6 H9 N O



RN 160364-68-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

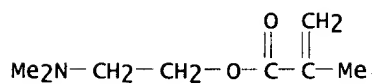
CM 1  
 CRN 42978-66-5  
 CMF C15 H24 O6  
 CCI IDS  
 CDES \*



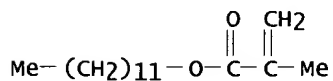


3 ( D1-Me )

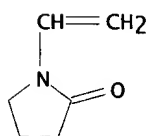
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2

CM 3

CRN 142-90-5  
CMF C16 H30 O2

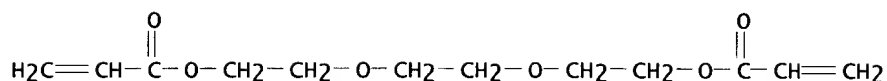
CM 4

CRN 88-12-0  
CMF C6 H9 N O

RN 160364-70-5 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 3-(dimethylamino)propyl ester, polymer with 1-ethenyl-2-pyrrolidinone, (1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)] di-2-propenoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

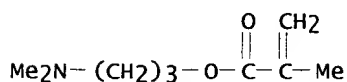
CM 1

CRN 42978-66-5  
CMF C15 H24 O6  
CCI IDS  
CDES \*

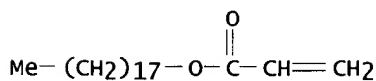


3 ( D1-Me )

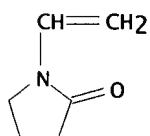
CM 2

CRN 20602-77-1  
CMF C9 H17 N O2

CM 3

CRN 4813-57-4  
CMF C21 H40 O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

L36 ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:253064 HCAPLUS

DOCUMENT NUMBER: 120:253064

TITLE: Hair styling mousse containing hair setting resins and polycationic conditioning resins

INVENTOR(S): Chambers, Gillian

PATENT ASSIGNEE(S): Procter and Gamble Co., USA

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9402115	A1	19940203	WO 1993-US6085	19930628
W: CA, FI, JP, NO, US				

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 EP 650351 A1 19950503 EP 1993-916772 19930628  
 R: DE, ES, FR, GB, IT  
 JP 08512018 T2 19961217 JP 1993-504473 19930628  
 PRIORITY APPLN. INFO.: GB 1992-15210 19920717  
 WO 1993-US6085 19930628

OTHER SOURCE(S): MARPAT 120:253064

AB A hair styling mousse is comprised of a a hair setting resin, a polycationic hair conditioning resin, an amphoteric surfactant, and water or a water/solvent mixt. The product generates a high quality mousse with good initial foam formation, foam breakdown under shear, non-soapiness, easy spreadability and nonstickiness. A hair styling mousse contained Luviskol VA64-P 2.70, Luviquat SC370 2.30, Tegobetaine L7, cetrimonium bromide 0.1, preservatives 0.2, PEG-40 castor oil 0.2, fragrance 0.1, Na4EDTA 0.1, and water q.s. 100%.

IT 26589-26-4  
 RL: BIOL (Biological study)  
 (hair styling mousse contg.)

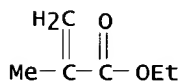
RN 26589-26-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-2-pyrrolidinone and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 97-63-2

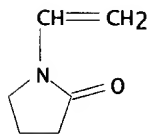
CMF C6 H10 O2



CM 2

CRN 88-12-0

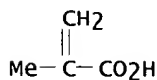
CMF C6 H9 N O



CM 3

CRN 79-41-4

CMF C4 H6 O2



L36 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1993:588269 HCAPLUS

DOCUMENT NUMBER: 119:188269

TITLE: Cationic thickening agents for cosmetics

INVENTOR(S): Uchama, Jujiro; Matsumoto, Junichi

PATENT ASSIGNEE(S): Osaka Juki Kagaku Kogyo Kk, Japan

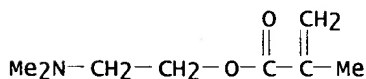
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

DOCUMENT TYPE: CODEN: JKXXAF  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1 Japanese  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 05140531	A2	19930608	JP 1991-300466	19911115
AB	A thickener is prepd. by polymg. (1) an amine-contg. (meth)acrylic monomer 15-85, (2) a vinyl monomer 0-80, (3) acryloyl group-contg. monomer 1-60, and (4) a crosslinking vinyl monomer 0.1-20.0 % by wt. For example, N,N-dimethylaminoethyl methacrylate, ethylene glycol dimethacrylate, methoxypolyethylene glycol methacrylate and N-vinylpyrrolidone were copolymd. A slurry of the resulting polymer was filtered under reduced pressure, dried, and pulverized to give a cationic thickener.				
IT	150265-74-0 150265-75-1 150265-76-2				
	150291-89-7 150291-90-0				
	RL: BIOL (Biological study) (cationic thickener manuf. with, for cosmetics)				
RN	150265-74-0	HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)				

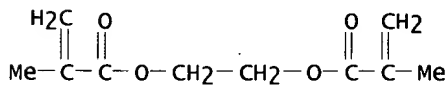
CM 1

CRN 2867-47-2  
 CMF C8 H15 N O2



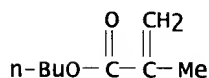
CM 2

CRN 97-90-5  
 CMF C10 H14 O4



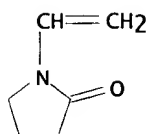
CM 3

CRN 97-88-1  
 CMF C8 H14 O2



CM 4

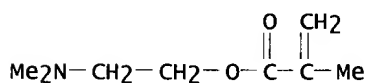
CRN 88-12-0  
 CMF C6 H9 N O



RN 150265-75-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1,1-dimethylethyl  
 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

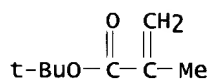
CM 1

CRN 2867-47-2  
 CMF C8 H15 N O2



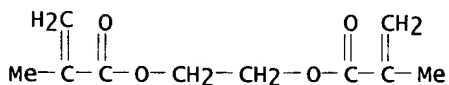
CM 2

CRN 585-07-9  
 CMF C8 H14 O2



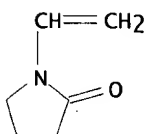
CM 3

CRN 97-90-5  
 CMF C10 H14 O4



CM 4

CRN 88-12-0  
 CMF C6 H9 N O

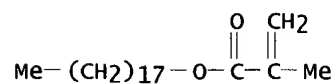


RN 150265-76-2 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone  
 and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

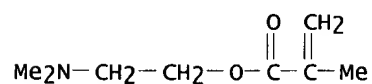
CMF C22 H42 O2



CM 2

CRN 2867-47-2

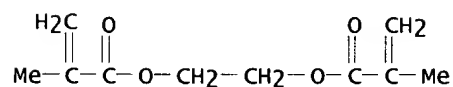
CMF C8 H15 N O2



CM 3

CRN 97-90-5

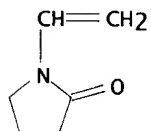
CMF C10 H14 O4



CM 4

CRN 88-12-0

CMF C6 H9 N O



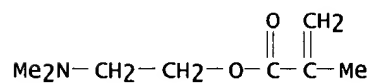
RN 150291-89-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone  
and hexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

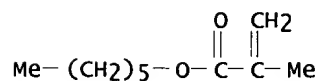
CRN 2867-47-2

CMF C8 H15 N O2



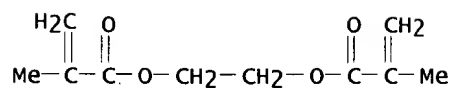
CM 2

CRN 142-09-6  
CMF C10 H18 O2



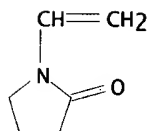
CM 3

CRN 97-90-5  
CMF C10 H14 O4



CM 4

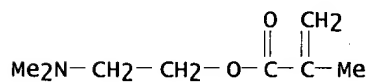
CRN 88-12-0  
CMF C6 H9 N O



RN 150291-90-0 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

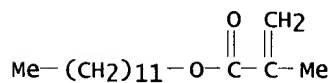
CM 1

CRN 2867-47-2  
CMF C8 H15 N O2



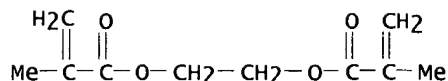
CM 2

CRN 142-90-5  
CMF C16 H30 O2



CM 3

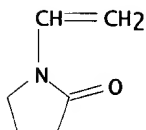
CRN 97-90-5  
CMF C10 H14 O4



CM 4

CRN 88-12-0

CMF C6 H9 N O



L36 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1991:415298 HCAPLUS

DOCUMENT NUMBER: 115:15298

TITLE: Hair-setting sprays containing amphoteric (meth)acrylic copolymers

INVENTOR(S): Narasaki, Kanji; Kawaguchi, Shigeoki; Matsumoto, Yoshio

PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

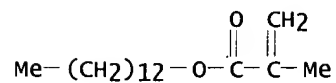
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 02300110	A2	19901212	JP 1989-117467	19890512
	JP 2979412	B2	19991115		
AB	Hair-setting sprays contain (i) amphoteric copolymers [prepd. by copolymn. of (25-50):(10-40):(10-65):(0-20) wt.% CH <sub>2</sub> :CR <sub>1</sub> COAR <sub>2</sub> NR <sub>3</sub> R <sub>4</sub> , CH <sub>2</sub> :CR <sub>1</sub> CO <sub>2</sub> R <sub>5</sub> , CH <sub>2</sub> :CR <sub>1</sub> CO <sub>2</sub> R <sub>6</sub> (R <sub>1</sub> = H, Me; R <sub>2</sub> = C <sub>1</sub> -4 alkylene; R <sub>3</sub> , R <sub>4</sub> = C <sub>1</sub> -3 alkyl; R <sub>5</sub> = C <sub>12</sub> -24 alkyl, alkylene; R <sub>6</sub> = C <sub>1</sub> -11 alkyl, alkylene, cycloalkyl; A = O, NH), and other vinyl monomers in hydrophilic solvents, modification of the resulting copolymers with halogenated fatty acid Na or K salts, removal of resulting ppts. by filtration, and optional treatment with ion exchange resins to remove ionic impurities] 0.5-15, (ii) solvents chosen from EtOH, PrOH, isopropanol, and 1-methoxypropanol 10-89.5, and (iii) propellants chosen from propane, butane, isobutane, 2,2-dimethylpropane, isopentane, and di-Me ether 10-75 wt.%. (Dimethylamino)ethyl methacrylate (I) 35, tridecyl methacrylate 20, stearyl methacrylate 10, Me methacrylate 10, tert-Bu methacrylate 25, and AIBN 0.6 part were refluxed in EtOH for 4 h, treated with ClCH <sub>2</sub> CO <sub>2</sub> K (at equal mol of I) at 80.degree. for 10 h, filtered, and the filtrate was treated with Diaion PK-220 and Diaion PA-416 to give amphoteric copolymer (mol. wt. 75,000). The amphoteric copolymer 8, EtOH 72, and 20:50:30 propane-butane-isobutane mixt. 20 parts were charged in a bottle to give hair spray, which showed good stability at low temp. and hair-setting effect.				
IT	134290-59-8DP, reaction products with potassium monochloroacetate RL: PREP (Preparation) (prepn. of, hair sprays from)				
RN	134290-59-8 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-ethylhexyl 2-propenoate, ethyl 2-methyl-2-propenoate and tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX				

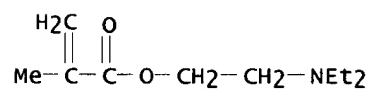


NAME)

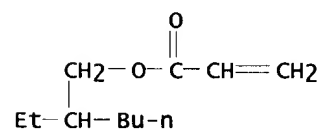
CM 1

CRN 2495-25-2  
CMF C17 H32 O2

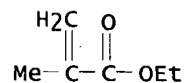
CM 2

CRN 105-16-8  
CMF C10 H19 N O2

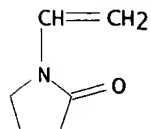
CM 3

CRN 103-11-7  
CMF C11 H20 O2

CM 4

CRN 97-63-2  
CMF C6 H10 O2

CM 5

CRN 88-12-0  
CMF C6 H9 N O

DOCUMENT NUMBER: 94:214384  
 TITLE: Resins as hair dressing, processes for making the resins and the hair dressings comprising them  
 INVENTOR(S): Hayama, Kazuhide; Narazaki, Kanji  
 PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd., Japan  
 SOURCE: Brit. UK Pat. Appl., 13 pp.  
 CODEN: BAXXDU  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2043077	A	19801001	GB 1980-3922	19800206
GB 2043077	B2	19830209		
JP 55104209	A2	19800809	JP 1979-12380	19790206
JP 61057803	B4	19861209		
JP 56092809	A2	19810727	JP 1979-173670	19791227
JP 62032165	B4	19870713		

PRIORITY APPLN. INFO.: JP 1979-12380 19790206  
 JP 1979-173670 19791227

AB A resin for use in water-sol. sprays for fixing or setting hair is manufd. by copolymg. in a hydrophilic solvent an aminoalkyl acrylate, methacrylate, acrylamide, or methacrylamide 25-45, a C4-24 alkyl, alkenyl, or cycloalkyl ester of acrylic or methacrylic acid 5-65, another acrylic or methacrylic acid ester 0-50, a hydrophilic ethylenically unsatd. monomer 0-20, and a different ethylenically unsatd. monomer 0-20%. The mixt. is treated with Na or K haloacetate, the ppt. is removed, and the copolymer soln. is subjected to ion exchange to remove impurities. Thus, CH<sub>2</sub>:CMeCO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub> (I) 30, CH<sub>2</sub>:CMeCO<sub>2</sub>Me 30, 2-ethylhexyl acrylate 15, tridecyl methacrylate 15, N-vinylpyrrolidone 10%, and 100 parts anhyd. EtOH were refluxed 4 h at 80.degree. under N in the presence of 0.6 part AIBN. A 50% EtOH suspension of I and an equimolar amt. of ClCH<sub>2</sub>CO<sub>2</sub>K were added and an amphotization reaction was carried out by heating 6 h at 80.degree. under N. The pptd. KCl was removed and the filtrate was passed through cation- and anion-exchanged resins. The soln. was dild. with 24 parts anhyd. EtOH to 6 parts soln., 45 parts CCl<sub>2</sub>F<sub>2</sub> was added, and the mixt. was charged into a sealed container and used as a hair lacquer to give a smooth transparent film with good setting strength, which did not block or flake, and could be removed by washing.

IT 76961-76-7DP, reaction products with potassium chloroacetate  
 76961-77-8DP, reaction products with potassium chloroacetate  
 76961-78-9DP, reaction products with potassium chloroacetate  
 RL: PREP (Preparation)  
 (prepn. of, for hair sprays)

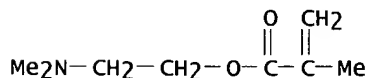
RN 76961-76-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-ethylhexyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

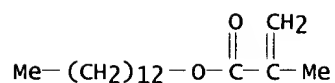
CMF C8 H15 N O2



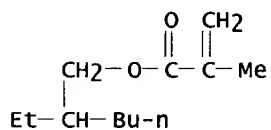
CM 2

CRN 2495-25-2

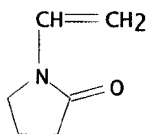
CMF C17 H32 O2



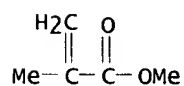
CM 3

CRN 688-84-6  
CMF C12 H22 O2

CM 4

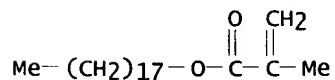
CRN 88-12-0  
CMF C6 H9 N O

CM 5

CRN 80-62-6  
CMF C5 H8 O2

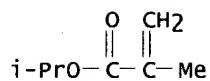
RN 76961-77-8 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 1-methylethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

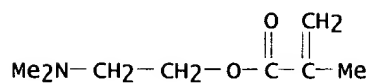
CRN 32360-05-7  
CMF C22 H42 O2

CM 2

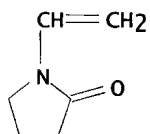
CRN 4655-34-9  
CMF C7 H12 O2



CM 3

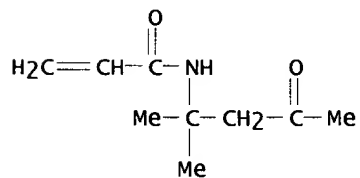
CRN 2867-47-2  
CMF C8 H15 N O2

CM 4

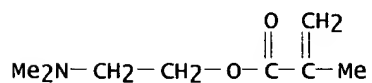
CRN 88-12-0  
CMF C6 H9 N O

RN 76961-78-9 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-  
2-propenamide, 1-ethenyl-2-pyrrolidinone, methyl 2-methyl-2-propenoate and  
tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

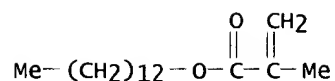
CRN 2873-97-4  
CMF C9 H15 N O2

CM 2

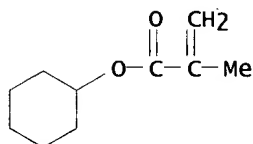
CRN 2867-47-2  
CMF C8 H15 N O2

CM 3

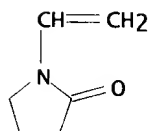
CRN 2495-25-2  
CMF C17 H32 O2



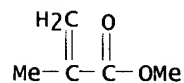
CM 4

CRN 101-43-9  
CMF C10 H16 O2

CM 5

CRN 88-12-0  
CMF C6 H9 N O

CM 6

CRN 80-62-6  
CMF C5 H8 O2

L36 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1976:45563 HCAPLUS  
 DOCUMENT NUMBER: 84:45563  
 TITLE: Stable aqueous emulsions of polymeric N-vinyl lactams  
 INVENTOR(S): Barabas, Eugene S.; Fein, Marvin M.  
 PATENT ASSIGNEE(S): GAF Corp., USA  
 SOURCE: Brit., 5 pp.  
 CODEN: BRXXAA  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AB	GB 1409145	A	19751008	GB 1973-35750	19730726
	Graft polymn. of acrylic acid and Et acrylate onto N-polyvinylpyrrolidone in aq. soln. gave stable emulsions contg. crosslinkable acrylic acid-ethyl acrylate-N-vinylpyrrolidone graft copolymer (I) [29434-92-2] with good film-forming properties useful in a wide range of coating				

applications and in hair spray compns. Thus, at 60.degree. 16 g of a 10% ammonium persulfate soln. was added to 431 g H2O, 115.2 g poly(N-vinylpyrrolidone), and 240 g of a 10% Na lauryl sulfate soln., the mixt. was kept 30 min at 100.degree., and 263.4 g Et acrylate and 5.4 g acrylic acid were added during 3 hr at 92.degree.. One g of 1% ammonium persulfate soln. was added every 2 hr until the amt. of unreacted monomers was <0.1 wt. % and the pH was adjusted to 6.0. Prior to pH adjustment the product solids content 35.2 wt. % and pH 2.1 had Brookfield viscosity 50.2 cP.

IT 29434-92-2P

RL: PREP (Preparation)

(graft, aq. emulsions of, manuf. of)

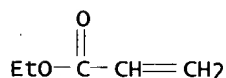
RN 29434-92-2 HCAPLUS

CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5

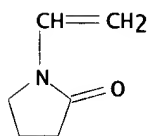
CMF C5 H8 O2



CM 2

CRN 88-12-0

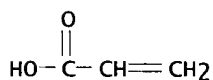
CMF C6 H9 N O



CM 3

CRN 79-10-7

CMF C3 H4 O2



R2 = t butyl(esters)

STR 1

FUBARA 09/762,039

=> d ibib abs hitstr

L46 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1993:656283 HCAPLUS  
 DOCUMENT NUMBER: 119:256283  
 TITLE: Hair preparations containing trimethylsiloxysilane-  
 contg. vinyl polymers  
 INVENTOR(S): Uchama, Jujiro; Ogasawara, Motomi  
 PATENT ASSIGNEE(S): Osaka Juki Kagaku Kogyo Kk, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05213722	A2	19930824	JP 1992-23692	19920210
JP 3086522	B2	20000911		

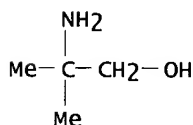
AB A mixt. comprising CH2:CR1CO2H (R1 = H, Me) 10-30, CH2:CR1  
 CO2(CH2)3Si(OSiMe3)3 (R1 = same as above) and/or CH2:CHSi(OSiMe3)3 1-20,  
 CH2:CR1COR2 (R1 = same as above; R2 = C1-4 alkoxy, amide) 20-85, and  
 N-vinylpyrrolidone 0-40 wt.% is polymd. to give a material useful in  
 prepg. hair conditioners. The compns. show good hair-setting property and  
 give gloss and smoothness to the hair. A hair prepn. contg. methacrylic  
 acid-tert-Bu methacrylate-methacryloxypropyltris(trimethylsiloxy)silane  
 copolymer aminomethylpropanol salt (prepn. given) was prepd.

IT 151372-33-7P  
 RL: PREP (Preparation)  
 (prepn. of, hair prepn. contg.)

RN 151372-33-7 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl  
 2-methyl-2-propenoate, ethenyl acetate, 3-ethenyl-1,1,1,5,5,5-hexamethyl-3-  
 [(trimethylsilyl)oxy]trisiloxane and 1-ethenyl-2-pyrrolidinone, compd.  
 with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
 CMF C4 H11 N O

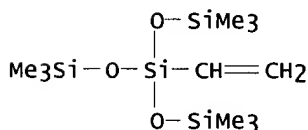


CM 2

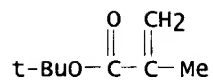
CRN 151372-32-6  
 CMF (C11 H30 O3 Si4 . C8 H14 O2 . C6 H9 N O . C4 H6 O2 . C4 H6 O2)x  
 CCI PMS

CM 3

CRN 5356-84-3  
 CMF C11 H30 O3 Si4

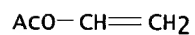


CM 4

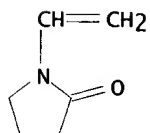
CRN 585-07-9  
CMF C8 H14 O2

← t-butyl ester

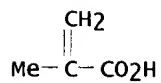
CM 5

CRN 108-05-4  
CMF C4 H6 O2

CM 6

CRN 88-12-0  
CMF C6 H9 N O

CM 7

CRN 79-41-4  
CMF C4 H6 O2



=&gt; d ibib abs hitstr 2

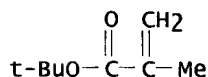
L46 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1988:438442 HCAPLUS  
 DOCUMENT NUMBER: 109:38442  
 TITLE: Vinylpyrrolidone terpolymers useful in hair preparations  
 INVENTOR(S): Nuber, Adolf; Sanner, Axel; Straub, Ferdinand; Vogel, Friedrich  
 PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 4 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3627970	A1	19880225	DE 1986-3627970	19860818
US 4767613	A	19880830	US 1987-76874	19870723
CA 1306417	A1	19920818	CA 1987-543655	19870804
EP 257444	A2	19880302	EP 1987-111649	19870812
EP 257444	A3	19880504		
EP 257444	B1	19910918		
R: DE, ES, FR, GB, IT, NL				
JP 63048315	A2	19880301	JP 1987-201961	19870814

PRIORITY APPLN. INFO.: DE 1986-3627970 19860818  
 AB The title polymers, with good soly. in hydrocarbon propellants and aerosol formulations and forming tack-free films on hair, contain N-vinylpyrrolidone (I) 30-50, tert-Bu (meth)acrylate 40-70, and (meth)acrylic acid 5-15% (optionally neutralized by amines) and have K-values of 10-60. The tert-Bu peroxy-pivalate-initiated polymn. of I 440, tert-Bu acrylate 550, and acrylic acid 110 parts in iso-PROH at 75-82.degree. gave a polymer with K-value (2% EtOH soln.) 19.8. This polymer gave hair curl retention (after 5 h at 25.degree. and 90% relative humidity) 56%, and an alc. soln. had compatibility with 4:6 C<sub>3</sub>H<sub>8</sub>-C<sub>4</sub>H<sub>10</sub> 71% at 0.degree.; vs. 29 and 65, resp., for a 40:50:10 I-n-Bu acrylate-acrylic acid copolymer.  
 IT 115401-89-3  
 RL: PROC (Process)  
 (for hair preps., manuf. of, with good compatibility with aerosol formulations)  
 RN 115401-89-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

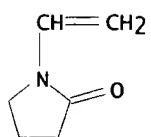
CM 1

CRN 585-07-9  
 CMF C8 H14 O2



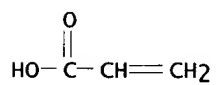
CM 2

CRN 88-12-0  
 CMF C6 H9 N O



CM 3

CRN 79-10-7  
CMF C3 H4 O2



R<sub>2</sub> = t-Butyl esters

FUBARA 09/762,039

STR 1

=> d ibib abs hitstr 1-10

L47 ANSWER 1 OF 10 HCAPLUS) COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 2000:351210 HCAPLUS  
DOCUMENT NUMBER: 132:348149  
TITLE: Water-soluble or -dispersible graft copolymers based  
on a poly(vinyl lactam), their preparation and use  
INVENTOR(S): Kim, Son Nguyen; Sanner, Axel; Hossel, Peter;  
Schehlmann, Volker  
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany  
SOURCE: Eur. Pat. Appl., 15 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1002811	A2	20000524	EP 1999-122635	19991113
EP 1002811	A3	20000719		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19853046	A1	20000525	DE 1998-19853046	19981118
JP 2000178323	A2	20000627	JP 1999-327139	19991117
CN 1257880	A	20000628	CN 1999-127747	19991118

PRIORITY APPLN. INFO.: DE 1998-19853046 A 19981118

AB The copolymers (K value 30-70), esp. useful in hair-setting  
preps., are prepd. by graft polyimg. CH<sub>2</sub>:CR1COXCM<sub>2</sub> (X = O, NR<sub>2</sub>; R<sub>1</sub>, R<sub>2</sub> =  
H, C1-6 alkyl) 50-85, CO<sub>2</sub>H-contg. vinyl monomer(s) 15-30, and CH<sub>2</sub>:CR1COXR  
(R = C6-30 alkyl) 0-25 wt.% onto a polymer (K value 30-50) contg.  
.gtoreq.30% units derived from .gtoreq.1 N-vinyl lactam with a  
(5-7)-membered ring to give a polymer with grafted portion/backbone wt.  
ratio 100:(5-200), which is at least partially neutralized. Thus, 150 g  
N-vinylcaprolactam was polymd. for 18 h at 80.degree. in EtOH with tert-Bu  
perpivalate as initiator, and the resulting polymer soln. was mixed with  
60.0 g methacrylic acid and 240 g tert-Bu acrylate in addnl. EtOH and  
polymd. 11 h at 80.degree., then 95% neutralized with 2-amino-2-methyl-1-  
propanol to give a polymer soln. which could be directly included in an  
aerosol hair spray formulation.

IT 269747-34-4P, tert-Butyl acrylate-methacrylic  
acid-N-vinylcaprolactam graft copolymer 2-amino-2-methyl-1-propanol salt  
269747-36-6P 269747-38-8P 269747-40-2P  
269747-42-4P 269747-44-6P 269747-46-8P  
269747-48-0P

RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(prepn. of water-sol. or -dispersible graft copolymers based on a  
poly(vinyl lactam) for use in hair preps.)

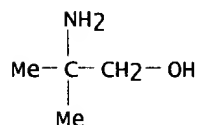
RN 269747-34-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate  
and 1-ethenylhexahydro-2H-azepin-2-one, graft, compd. with  
2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5

CMF C4 H11 N O

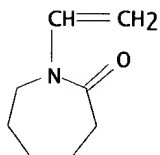


CM 2

CRN 269747-33-3  
 CMF (C8 H13 N O . C7 H12 O2 . C4 H6 O2)x  
 CCI PMS  
 CDES 8:PM,GRAFT

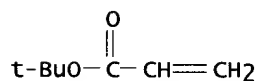
CM 3

CRN 2235-00-9  
 CMF C8 H13 N O



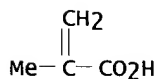
CM 4

CRN 1663-39-4  
 CMF C7 H12 O2



CM 5

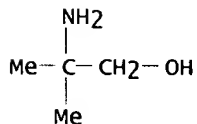
CRN 79-41-4  
 CMF C4 H6 O2



RN 269747-36-6 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one and 1-ethenyl-2-pyrrolidinone, graft, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

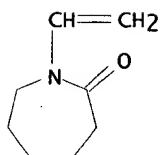
CRN 124-68-5  
 CMF C4 H11 N O



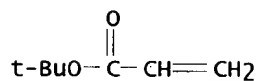
CM 2

CRN 269747-35-5  
 CMF (C8 H13 N O . C7 H12 O2 . C6 H9 N O . C4 H6 O2)x  
 CCI PMS  
 CDES 8:PM,GRAFT

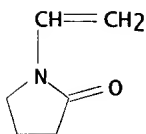
CM 3

CRN 2235-00-9  
CMF C8 H13 N O

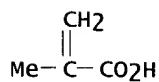
CM 4

CRN 1663-39-4  
CMF C7 H12 O2

CM 5

CRN 88-12-0  
CMF C6 H9 N O

CM 6

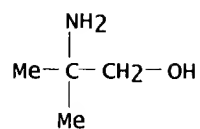
CRN 79-41-4  
CMF C4 H6 O2

RN 269747-38-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl 2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one and 1-ethenyl-2-pyrrolidinone, graft, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
CMF C4 H11 N O



CM 2

CRN 269747-37-7

CMF (C9 H18 N2 O . C8 H13 N O . C7 H12 O2 . C6 H9 N O . C4 H6 O2)x

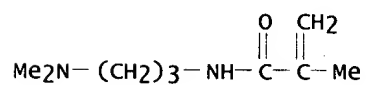
CCI PMS

CDES 8:PM,GRAFT

CM 3

CRN 5205-93-6

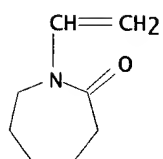
CMF C9 H18 N2 O



CM 4

CRN 2235-00-9

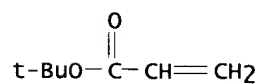
CMF C8 H13 N O



CM 5

CRN 1663-39-4

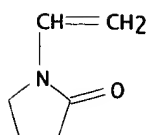
CMF C7 H12 O2



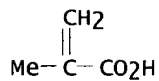
CM 6

CRN 88-12-0

CMF C6 H9 N O

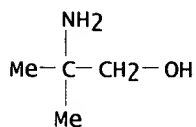


CM 7

CRN 79-41-4  
CMF C4 H6 O2

RN 269747-40-2 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate and 1-ethenyl-2-pyrrolidinone, graft, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

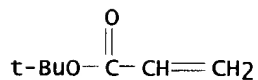
CM 1

CRN 124-68-5  
CMF C4 H11 N O

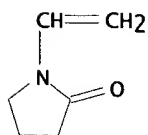
CM 2

CRN 269747-39-9  
CMF (C7 H12 O2 . C6 H9 N O . C4 H6 O2)x  
CCI PMS  
CDES 8:PM,GRAFT

CM 3

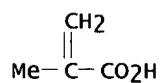
CRN 1663-39-4  
CMF C7 H12 O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

CM 5

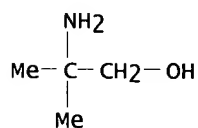
CRN 79-41-4  
CMF C4 H6 O2



RN 269747-42-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one and octadecyl 2-methyl-2-propenoate, graft, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
 CMF C4 H11 N O

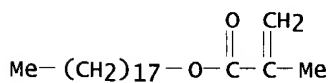


CM 2

CRN 269747-41-3  
 CMF (C22 H42 O2 . C8 H13 N O . C7 H12 O2 . C4 H6 O2)x  
 CCI PMS  
 CDES 8:PM,GRAFT

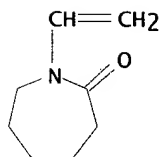
CM 3

CRN 32360-05-7  
 CMF C22 H42 O2



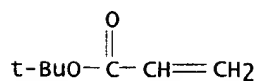
CM 4

CRN 2235-00-9  
 CMF C8 H13 N O



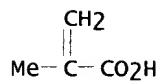
CM 5

CRN 1663-39-4  
 CMF C7 H12 O2



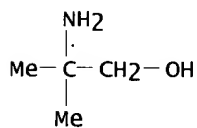


CM 6

CRN 79-41-4  
CMF C4 H6 O2

RN 269747-44-6 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one, 1-ethenyl-2-pyrrolidinone and octadecyl 2-methyl-2-propenoate, graft, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

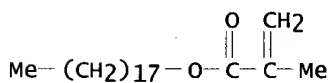
CM 1

CRN 124-68-5  
CMF C4 H11 N O

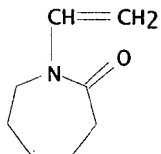
CM 2

CRN 269747-43-5  
 CMF (C22 H42 O2 . C8 H13 N O . C7 H12 O2 . C6 H9 N O . C4 H6 O2)x  
 CCI PMS  
 CDES 8:PM,GRAFT

CM 3

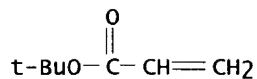
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CMF C22 H42 O2

CM 4

CRN 2235-00-9  
CMF C8 H13 N O

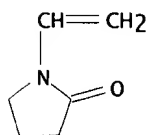
CM 5

CRN 1663-39-4  
CMF C7 H12 O2



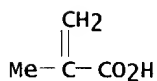
CM 6

CRN 88-12-0  
CMF C6 H9 N O



CM 7

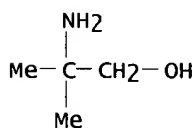
CRN 79-41-4  
CMF C4 H6 O2



RN 269747-46-8 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl 2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one, 1-ethenyl-2-pyrrolidinone and octadecyl 2-methyl-2-propenoate, graft, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
CMF C4 H11 N O

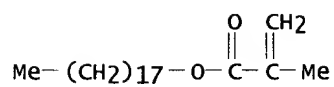


CM 2

CRN 269747-45-7  
CMF (C22 H42 O2 . C9 H18 N2 O . C8 H13 N O . C7 H12 O2 . C6 H9 N O . C4 H6 O2)x  
CCI PMS  
CDES 8:PM,GRAFT

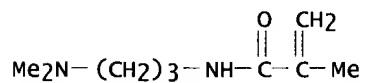
CM 3

CRN 32360-05-7  
CMF C22 H42 O2



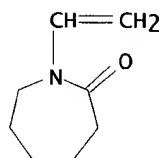
CM 4

CRN 5205-93-6  
CMF C9 H18 N2 O



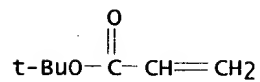
CM 5

CRN 2235-00-9  
CMF C8 H13 N O



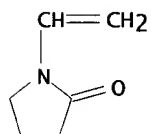
CM 6

CRN 1663-39-4  
CMF C7 H12 O2



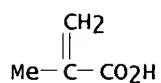
CM 7

CRN 88-12-0  
CMF C6 H9 N O



CM 8

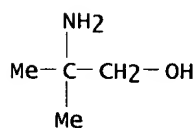
CRN 79-41-4  
CMF C4 H6 O2



RN 269747-48-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate, 1-ethenyl-2-pyrrolidinone and octadecyl 2-methyl-2-propenoate, graft, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
 CMF C4 H11 N O

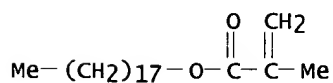


CM 2

CRN 269747-47-9  
 CMF (C22 H42 O2 . C7 H12 O2 . C6 H9 N O . C4 H6 O2)x  
 CCI PMS  
 CDES 8:PM,GRAFT

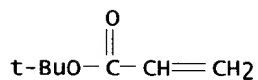
CM 3

CRN 32360-05-7  
 CMF C22 H42 O2



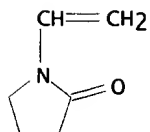
CM 4

CRN 1663-39-4  
 CMF C7 H12 O2

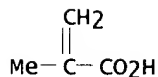


CM 5

CRN 88-12-0  
 CMF C6 H9 N O



CM 6

CRN 79-41-4  
CMF C4 H6 O2

L47 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:779109 HCAPLUS

DOCUMENT NUMBER: 132:23290

TITLE: Personal care composition containing a clear homogeneous polymer of an N-vinyl lactam

INVENTOR(S): Liu, Kou-Chang

PATENT ASSIGNEE(S): Isp Investments Inc., USA

SOURCE: U.S., 7 pp., Cont.-in-part of U.S. 5,609,865.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5997855	A	19991207	US 1998-14465	19980128
US 5523369	A	19960604	US 1994-365257	19941228
US 5609865	A	19970311	US 1994-365258	19941228
US 5626836	A	19970506	US 1994-365259	19941228
US 6110454	A	20000829	US 1996-655492	19960530
WO 9938494	A1	19990805	WO 1999-US946	19990113
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9922325	A1	19990816	AU 1999-22325	19990113
PRIORITY APPLN. INFO.:				
			US 1994-365257	A2 19941228
			US 1994-365258	A2 19941228
			US 1994-365259	A2 19941228
			US 1998-14465	A 19980128
			WO 1999-US946	W 19990113

AB The patent describes a multicomponent homogeneous polymer of (a) from about 30 to about 90 wt.-% of a N-vinyl lactam, (b) from about 5 to about 30 wt.-% of a quaternized and/or nonquaternized aminoalkylacrylic ester and/or amide, (c) from about 0.5 to about 30 wt.-% of an unsatd. monomer selected from the group consisting of an acrylic ester or amide having a C4-C22 alkyl group, a C4-C22 .alpha.-olefin, a C4-C22 vinyl ether (VE) and a vinyl ester of a C2-C22 carboxylic acid and (d) from about 1 to about 30 wt.-% of an unsubstituted acrylic or methacrylic acid and/or an unsubstituted amide of said acrylic or methacrylic acid and optionally, (e) up to 20 wt.-% of a mono- or di-functional polysiloxane; all monomers combined to form a 100% polymer compn. of randomly distributed monomers for use in personal care formulations, particularly as a hair fixative where the clear, colorless and conditioning film forming properties of the polymer produces a silky, lustrous appearance to the hair and long lasting styling hold.

IT 234764-46-6P, Acrylic acid-N-(dimethylaminopropyl)methacrylamide-dodecyl methacrylate-N-vinylpyrrolidone copolymer 234764-47-7P, Acrylic acid-3-methacrylamidopropyltrimethylammonium chloride-octadecyl methacrylate-N-vinylpyrrolidone copolymer 234764-48-8P, Acrylic acid-N-(dimethylaminopropyl)methacrylamide-octadecyl methacrylate-N-vinylcaprolactam copolymer 234764-49-9P, Acrylic acid-

tert-butyl acrylate-N-(dimethylaminopropyl)methacrylamid  
 e-dodecyl methacrylate-N-vinylcaprolactam-N-vinylpyrrolidone copolymer  
 234764-50-2P, Acrylic acid-N-dimethylaminoethyl  
 methacrylate-dodecyl methacrylate-N-vinylcaprolactam-N-vinylpyrrolidone  
 copolymer 251949-02-7P  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (personal hair care compn. contg. clear homogeneous polymer  
 of N-vinylactam)

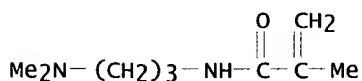
RN 234764-46-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with  
 N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1-ethenyl-2-  
 pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 5205-93-6

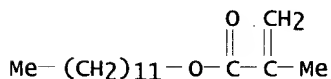
CMF C9 H18 N2 O



CM 2

CRN 142-90-5

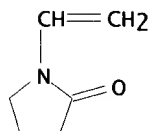
CMF C16 H30 O2



CM 3

CRN 88-12-0

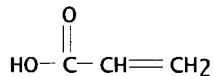
CMF C6 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2

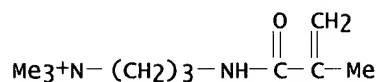


RN 234764-47-7 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-,  
 chloride, polymer with 1-ethenyl-2-pyrrolidinone, octadecyl  
 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

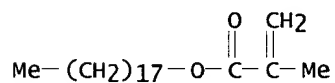
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CMF C10 H21 N2 O . C1



● C1 -

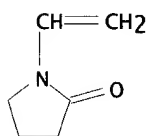
CM 2

CRN 32360-05-7  
CMF C22 H42 O2



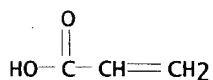
CM 3

CRN 88-12-0  
CMF C6 H9 N O



CM 4

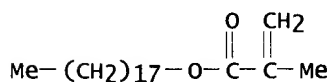
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CMF C3 H4 O2



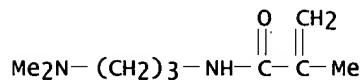
RN 234764-48-8 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1-ethenylhexahydro-2H-  
azepin-2-one and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

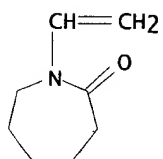
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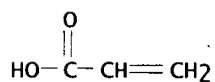
CM 2

CRN 5205-93-6  
CMF C9 H18 N2 O

CM 3

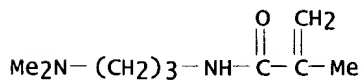
CRN 2235-00-9  
CMF C8 H13 N O

CM 4

CRN 79-10-7  
CMF C3 H4 O2

RN 234764-49-9 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl  
2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one, 1-ethenyl-2-  
pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

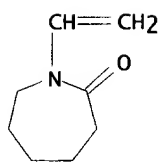
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CRN 5205-93-6  
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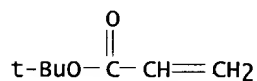
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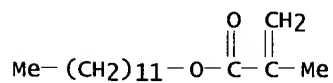




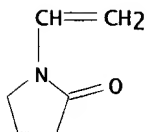
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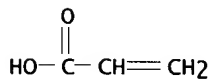
CM 4

CRN 142-90-5  
CMF C16 H30 O2

CM 5

CRN 88-12-0  
CMF C6 H9 N O

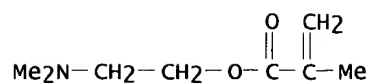
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CRN 79-10-7  
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RN 234764-50-2 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

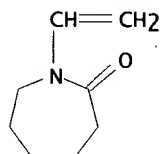
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CMF C8 H15 N O2



CM 2

CRN 2235-00-9

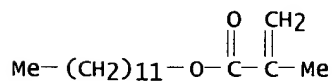
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CM 3

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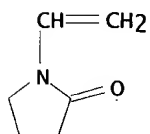
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CM 4

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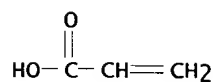
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



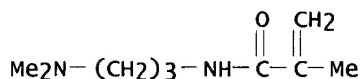
RN 251949-02-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1-ethenylhexahydro-2H-  
azepin-2-one and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 5205-93-6

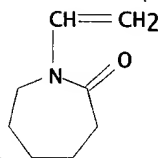
CMF C9 H18 N2 O



CM 2

CRN 2235-00-9

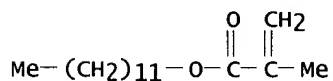
CMF C8 H13 N O



CM 3

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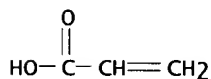
CMF C16 H30 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



L47 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:736299 HCAPLUS

DOCUMENT NUMBER: 131:337836

TITLE: Crosslinked, water-dispersible polyurethanes  
INVENTOR(S): Nguyen, Kim Son; Sanner, Axel; Hossel, Peter;  
Schehlmann, Volker

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany

SOURCE: Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent  
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 957119	A1	19991117	EP 1999-108455	19990512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19821732	A1	19991118	DE 1998-19821732	19980514
US 6262176	B1	20010717	US 1999-303426	19990503

JP 2000026565 A2 20000125 JP 1999-133228 19990513  
 CN 1236783 A 19991201 CN 1999-107688 19990514  
 PRIORITY APPLN. INFO.: DE 1998-19821732 A 19980514

AB The title polyurethanes, with good redispersibility, forming smooth, flexible films, and useful in hair treatment preps., are prepd. from H<sub>2</sub>O-dispersible urethane prepolymers bearing terminal NCO groups (prepd. from compds. with mol. wt. 56-300 contg. 2 active H atoms/mol., polymers bearing 2 active H atoms/mol., compds. bearing ionic groups and 2 active H atoms/mol., and diisocyanates), and polymers bearing NCO-reactive groups (OH, primary or secondary amino, or CO<sub>2</sub>H groups or their salts). Reaction of 80 parts urethane prepolymer (prepd. from polyester diol, mol. wt. 1000, from isophthalic and adipic acids and hexanediol 0.8, cyclohexanedimethanol 1.7, dimethylolpropionic acid 3, and IPDI 6 mol) with 20 parts 3:97 hydroxyethyl methacrylate-N-vinylpyrrolidone copolymer gave a product with K-value 33. Use of the products in hair spray formulations is exemplified.

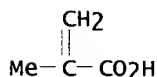
IT 250228-35-4DP, Tert-Butyl acrylate-2-hydroxyethyl methacrylate-sodium methacrylate-1-vinyl-2-pyrrolidinone copolymer, reaction products with isocyanate-terminated polyurethanes 250228-38-7DP, Tert-Butyl acrylate-2-(tert-butylamino)ethyl methacrylate-N-vinylcaprolactam copolymer, reaction products with isocyanate-terminated polyurethanes 250228-39-8DP, reaction products with isocyanate-terminated polyurethanes 250228-40-1DP, reaction products with isocyanate-terminated polyurethanes 250228-44-5DP, 2-(tert-Butylamino)ethyl methacrylate-(dimethylamino)propyl methacrylate-1-vinyl-2-pyrrolidinone copolymer, reaction products with isocyanate-terminated polyurethanes 250228-45-6DP, reaction products with isocyanate-terminated polyurethanes 250228-47-8DP, 2-(tert-Butylamino)ethyl methacrylate-(dimethylamino)propyl methacrylate-N-vinylcaprolactam copolymer, reaction products with isocyanate-terminated polyurethanes 250228-48-9DP, reaction products with isocyanate-terminated polyurethanes

RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (crosslinked, water-dispersible polyurethanes)

RN 250228-35-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 1,1-dimethylethyl 2-propenoate, 1-ethenyl-2-pyrrolidinone and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

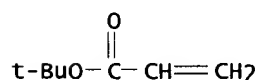
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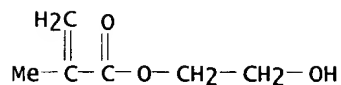
● Na

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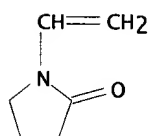
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 CMF C7 H12 O2



CM 3

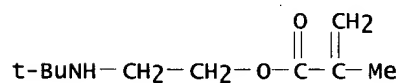
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CMF C6 H10 O3

CM 4

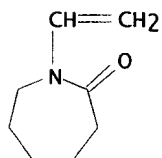
CRN 88-12-0  
CMF C6 H9 N O

RN 250228-38-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(1,1-dimethylethyl)amino]ethyl ester, polymer with 1,1-dimethylethyl 2-propenoate and 1-ethenylhexahydro-2H-azepin-2-one (9CI) (CA INDEX NAME)

CM 1

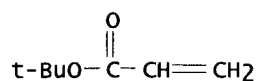
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CMF C10 H19 N O2

CM 2

CRN 2235-00-9  
CMF C8 H13 N O

CM 3

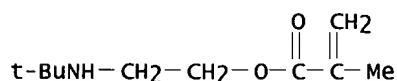
CRN 1663-39-4  
CMF C7 H12 O2



RN 250228-39-8 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(1,1-dimethylethyl)amino]ethyl ester,  
 polymer with 1,1-dimethylethyl 2-propenoate and 1-ethenyl-2-pyrrolidinone  
 (9CI) (CA INDEX NAME)

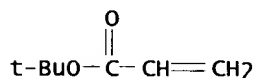
CM 1

CRN 3775-90-4  
 CMF C10 H19 N O2



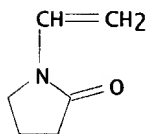
CM 2

CRN 1663-39-4  
 CMF C7 H12 O2



CM 3

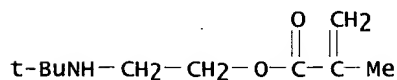
CRN 88-12-0  
 CMF C6 H9 N O



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 CN 2-Propenoic acid, 2-methyl-, 2-[(1,1-dimethylethyl)amino]ethyl ester,  
 polymer with 1,1-dimethylethyl 2-propenoate, 1-ethenyl-2-pyrrolidinone and  
 2-ethylhexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

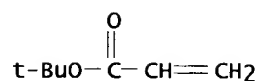
CM 1

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 CMF C10 H19 N O2

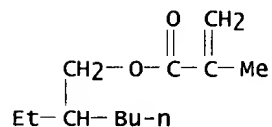


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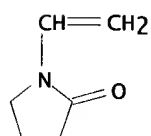
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CM 3

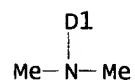
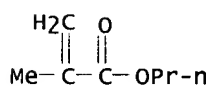
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CMF C12 H22 O2

CM 4

CRN 88-12-0  
CMF C6 H9 N O

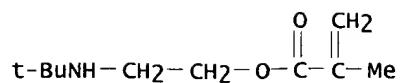
RN 250228-44-5 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, (dimethylamino)propyl ester, polymer with  
2-[(1,1-dimethylethyl)amino]ethyl 2-methyl-2-propenoate and  
1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 76847-89-7  
CMF C9 H17 N O2  
CCI IDS  
CDES \*

CM 2

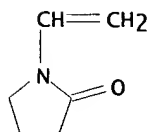
CRN 3775-90-4  
CMF C10 H19 N O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



RN 250228-45-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (dimethylamino)propyl ester, polymer with  
 2-[(1,1-dimethylethyl)amino]ethyl 2-methyl-2-propenoate,  
 1-ethenylhexahydro-2H-azepin-2-one and 1-ethenyl-2-pyrrolidinone (9CI)  
 (CA INDEX NAME)

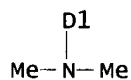
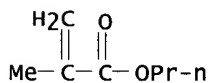
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CRN 76847-89-7

CMF C9 H17 N O2

CCI IDS

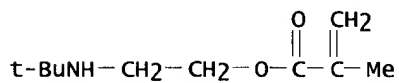
CDES \*



CM 2

CRN 3775-90-4

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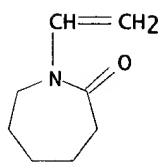


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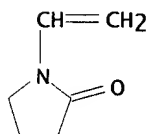
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CMF C8 H13 N O



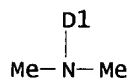
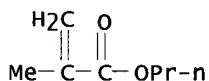


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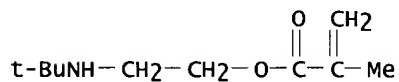
CRN 88-12-0  
CMF C6 H9 N O

RN 250228-47-8 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, (dimethylamino)propyl ester, polymer with  
2-[(1,1-dimethylethyl)amino]ethyl 2-methyl-2-propenoate and  
1-ethenylhexahydro-2H-azepin-2-one (9CI) (CA INDEX NAME)

CM 1

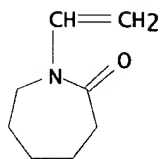
CRN 76847-89-7  
CMF C9 H17 N O2  
CCI IDS  
CDES \*

CM 2

CRN 3775-90-4  
CMF C10 H19 N O2

CM 3

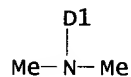
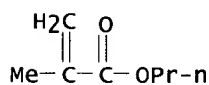
CRN 2235-00-9  
CMF C8 H13 N O



RN 250228-48-9 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, (dimethylamino)propyl ester, polymer with  
 2-[(1,1-dimethylethyl)amino]ethyl 2-methyl-2-propenoate, 1,1-dimethylethyl  
 2-propenoate, 1-ethenyl-2-pyrrolidinone and 2-ethylhexyl  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

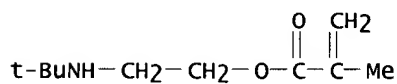
CM 1

CRN 76847-89-7  
 CMF C9 H17 N O2  
 CCI IDS  
 CDES \*



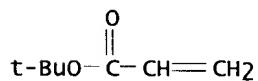
CM 2

CRN 3775-90-4  
 CMF C10 H19 N O2



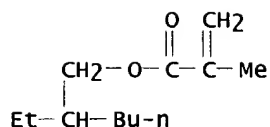
CM 3

CRN 1663-39-4  
 CMF C7 H12 O2

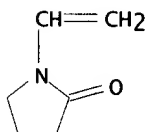


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CRN 688-84-6  
 CMF C12 H22 O2



CM 5

CRN 88-12-0  
CMF C6 H9 N OREFERENCE COUNT:  
REFERENCE(S):

- 4  
 (1) BASF AG; EP 0773246 A 1997 HCAPLUS  
 (2) Dainippon Ink & Chem KK; JP 05295078 A 1993 HCAPLUS  
 (3) Hoechst AG; EP 0741156 A 1996 HCAPLUS  
 (4) Huettenes, A; EP 0593959 A 1994 HCAPLUS

L47 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:204055 HCAPLUS

DOCUMENT NUMBER: 126:190726

TITLE: Preparation of amine-oxide-containing vinyl polymers for hair compositions

INVENTOR(S): Hayama, Kazuhide; Kitani, Yasuo; Hiwatashi, Tomoaki

PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan

SOURCE: Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English.

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 754444	A2	19970122	EP 1996-250161	19960718
EP 754444	A3	19970319		
EP 754444	B1	19980527		
R: DE, FR, GB, IT				
US 6123933	A	20000926	US 1996-682239	19960717
CN 1142935	A	19970219	CN 1996-106189	19960719
JP 10072323	A2	19980317	JP 1996-190623	19960719
PRIORITY APPLN. INFO.:			JP 1995-204027	A 19950719
			JP 1996-163131	A 19960624

AB A hair cosmetic compn. comprises an amine-oxide-contg. water-sol. polymethacrylate having an av. mol. wt. of 5000-1,000,000. The compn. has excellent setting force, conditioning effects and hair -washing property and is free from stickiness. Thus, 30 parts N,N-dimethylaminoethyl methacrylate and 70 parts stearyl methacrylate were copolymd. in 150 parts EtOH in the presence of 0.6 part 2,2'-azobisisobutyronitrile. A 31% aq. soln. of H2O2 was added to the above polymer to convert it to an amine oxide-contg. polymer (I) with an av. mol. wt. of 100,000. A hair rinse contained stearyltrimethylammonium chloride 1.5, cetanol 2, I 1.5, perfume 0.2 and water to 100%.

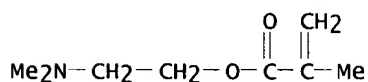
IT 187538-64-3DP, oxidized

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of amine-oxide-contg. vinyl polymers for hair

compns.)  
 RN 187538-64-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with  
 1,1-dimethylethyl 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone  
 (9CI) (CA INDEX NAME)

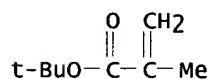
CM 1

CRN 2867-47-2  
 CMF C8 H15 N O2



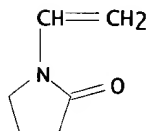
CM 2

CRN 585-07-9  
 CMF C8 H14 O2



CM 3

CRN 88-12-0  
 CMF C6 H9 N O

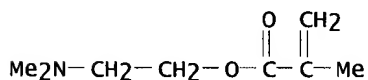


IT 187538-64-3P, tert-Butyl methacrylate-N,N-  
 dimethylaminoethyl methacrylate-N-Vinyl-2-pyrrolidinone copolymer  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of amine-oxide-contg. vinyl polymers for hair  
 compns.)

RN 187538-64-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with  
 1,1-dimethylethyl 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone  
 (9CI) (CA INDEX NAME)

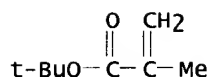
CM 1

CRN 2867-47-2  
 CMF C8 H15 N O2

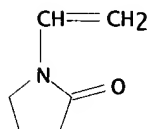


CM 2

CRN 585-07-9  
 CMF C8 H14 O2



CM 3

CRN 88-12-0  
CMF C6 H9 N O

L47 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:635131 HCAPLUS

DOCUMENT NUMBER: 125:256758

TITLE: water-soluble copolymers containing sulfo groups for use in aqueous hair preparations

INVENTOR(S): Blankenburg, Rainer; Sperling, Karin; Sanner, Axel

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Eur. Pat. Appl., 5 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 729987	A2	19960904	EP 1996-102837	19960226
EP 729987	A3	19960911		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, PT, SE				
DE 19507249	A1	19960905	DE 1995-19507249	19950302
CA 2170567	AA	19960903	CA 1996-2170567	19960228
JP 08253536	A2	19961001	JP 1996-45157	19960301
CN 1138592	A	19961225	CN 1996-105534	19960302
PRIORITY APPLN. INFO.:			DE 1995-19507249	19950302

AB The title copolymers are prepd. by copolyng. 50-90% monomers selected from C1-18 alkyl (meth)acrylates and vinyl esters of satd. C2-10 monocarboxylic acids (e.g., tert-Bu acrylate and Et acrylate), 10-25% sulfo group-contg. vinyl monomers (e.g., 2-acrylamido-2-methylpropanesulfonic acid), and 0-40% (meth)acrylic acid, (meth)acrylamide, N-(C3-8 alkyl)acrylamide, N,N-dimethylacrylamide, N-vinylpyrrolidone, and/or N-vinylcaprolactam. The film-forming copolymers have good water soly. and drying properties and are useful in aq. hair sprays.

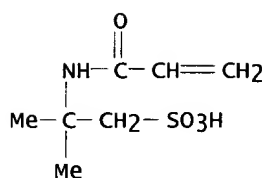
IT 182322-55-0, 2-Acrylamido-2-methylpropanesulfonic acid-tert-butyl acrylate-N-vinylpyrrolidone copolymer  
 RL: MSC (Miscellaneous); NUU (Nonbiological use, unclassified); PRP (Properties); USES (Uses)  
 (with water soly. for use in aq. hair sprays)

RN 182322-55-0 HCAPLUS

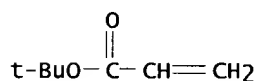
CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

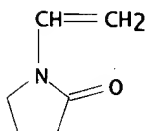
CRN 15214-89-8  
CMF C7 H13 N O4 S



CM 2

CRN 1663-39-4  
CMF C7 H12 O2

CM 3

CRN 88-12-0  
CMF C6 H9 N O

L47 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:379718 HCAPLUS

DOCUMENT NUMBER: 125:41421

TITLE: Soluble copolymers as film formers in hair  
-styling compositions

INVENTOR(S): Blankenburg, Rainer; Sanner, Axel

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Eur. Pat. Appl., 6 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 709411	A2	19960501	EP 1995-116525	19951020
EP 709411	A3	19960911		
EP 709411	B1	19980617		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
DE 4438706	A1	19960502	DE 1994-4438706	19941029
ES 2117344	T3	19980801	ES 1995-116525	19951020
US 5635169	A	19970603	US 1995-548726	19951026
CA 2161576	AA	19960430	CA 1995-2161576	19951027
JP 08231649	A2	19960910	JP 1995-280750	19951027
CN 1145371	A	19970319	CN 1995-120363	19951028
			DE 1994-4438706	19941029

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 125:41421

AB The title copolymers, having K value 30-50, are prepd. by radical soln. polymn. of .gtoreq.1 monomer selected from N-vinylpyrrolidone, N-vinylcaprolactam, and N-vinylimidazole with other monounsatt. monomers (e.g., vinyl acetate or tert-Bu acrylate) and .gtoreq.1 monomer with

.gtoreq.2 non-conjugated olefinic double bonds (e.g., divinylethyleneurea or 1,4-butanediol dimethacrylate) in an alc. soln. The copolymers are sol. in alcs. (e.g., EtOH or iso-PrOH) or alc.-water mixts. and useful in hair sprays, hair-styling creams, etc.

IT 177983-21-0P, 1,4-Butanediol dimethacrylate-tert-butyl acrylate-N-vinylpyrrolidone copolymer  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (prepn. and use as film former in hair-styling comps.)

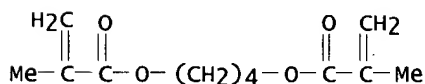
RN 177983-21-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester, polymer with 1,1-dimethylethyl 2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 2082-81-7

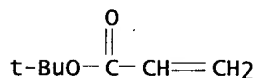
CMF C12 H18 O4



CM 2

CRN 1663-39-4

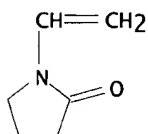
CMF C7 H12 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



L47 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:708703 HCAPLUS

DOCUMENT NUMBER: 123:92869

TITLE: Styling aid containing a volatile alkylmethylsilicone

INVENTOR(S): Vincent, Judith Mervane; Hami, Annette Marie

PATENT ASSIGNEE(S): Dow Corning Corp., USA

SOURCE: Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW

DOCUMENT TYPE: Patent

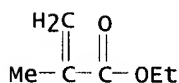
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

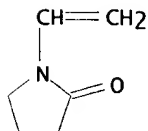
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 657157	A1	19950614	EP 1994-308862	19941130

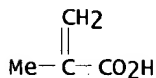
R: DE, FR, GB, IT, SE  
 JP 07196462 A2 19950801 JP 1994-298341 19941201  
 PRIORITY APPLN. INFO.: US 1993-161367 19931206  
 AB A hair-styling aid comprises a mixt. of C1-5-alkyl alc. solvent, a film-forming resin, water, and a volatile short-chain linear or cyclic alkylmethylsilicone fluid, with the remainder of the mixt. being materials such as neutralizers, perfumes and fragrances. The styling aid is characterized by being free of a plasticizer. For example, a hair prepn. contained Gantrez ES225 5.0, EtOH 80.0, 2-amino-2-methyl-1-propanol 0.2, water 12.8, and 3-hexylheptamethyltrisiloxane 2.0%.  
 IT 26589-26-4  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (hair-styling prepn. contg. volatile alkylmethylsilicone and film-forming polymers and alcs.)  
 RN 26589-26-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-2-pyrrolidinone and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 97-63-2  
 CMF C6 H10 O2



CM 2  
 CRN 88-12-0  
 CMF C6 H9 N O



CM 3  
 CRN 79-41-4  
 CMF C4 H6 O2



L47 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1992:66904 HCAPLUS  
 DOCUMENT NUMBER: 116:66904  
 TITLE: Hair styling compositions  
 INVENTOR(S): Wells, Robert Lee; King, Bonnie Theresa; Snyder, Michael Albert; Frey, Donald Hugh  
 PATENT ASSIGNEE(S): Procter and Gamble Co., USA  
 SOURCE: PCT Int. Appl., 22 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1



## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9115187	A1	19911017	WO 1991-US2213	19910403
W: AU, BR, CA, FI, HU, JP, KR, NO, PL, SU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5104642	A	19920414	US 1990-506409	19900406
AU 9176750	A1	19911030	AU 1991-76750	19910403
CN 1056052	A	19911113	CN 1991-102946	19910406
CN 1025547	B	19940803		

PRIORITY APPLN. INFO.: US 1990-506409 19900406  
WO 1991-US2213 19910403

AB A hair-styling compn. comprises (1) 0.2-20.0% of a polymer contg. .gtoreq.1 hydrophobic monomer, with mol. wt. 5000-1,000,000, Tg >-20.degree., and soly. 8.5-12.0 (cal/mL)<sup>1/2</sup>, (2) 0.2-20.0% of a solvent having a b.p. .ltoreq.300.degree. and water soly. >0.2% at 25.degree., and (3) an aq. carrier the balance. A hair-styling tonic contained vinyl pyrrolidone-vinyl acetate copolymer (5:95) 3.0, benzyl alc. 3.0, polysorbate-80 0.2, perfume 0.1, hydroxypropyl Me cellulose 0.4, preservative 0.3, and water to 100.0%.

IT 92832-85-4, Butyl acrylate-vinyl acetate-vinylpyrrolidone copolymer 138216-02-1  
RL: BIOL (Biological study)  
(hair-styling preps. contg.)

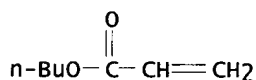
RN 92832-85-4 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

CMF C7 H12 O2



CM 2

CRN 108-05-4

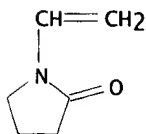
CMF C4 H6 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



RN 138216-02-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate, ethenylbenzenesulfonic acid and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

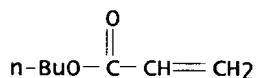
CM 1

CRN 26914-43-2  
 CMF C8 H8 O3 S  
 CCI IDS  
 CDES 8:ID

D1-CH=CH<sub>2</sub>D1-SO<sub>3</sub>H

CM 2

CRN 141-32-2  
 CMF C7 H12 O2



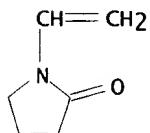
CM 3

CRN 108-05-4  
 CMF C4 H6 O2

AcO-CH=CH<sub>2</sub>

CM 4

CRN 88-12-0  
 CMF C6 H9 N O



L47 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1990:612848 HCAPLUS

DOCUMENT NUMBER: 113:212848

TITLE: Film-forming copolymers of tert-butyl(methyl)acrylate

INVENTOR(S): Potthoff-Karl, Birgit; Sperling, Karin; Sanner, Axel

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 5 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

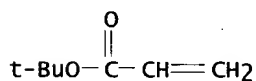
LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3842183	A1	19900621	DE 1988-3842183	19881215
US 5132417	A	19920721	US 1989-438306	19891120
CA 2003987	AA	19900615	CA 1989-2003987	19891127
EP 373442	A2	19900620	EP 1989-122185	19891201
EP 373442	A3	19910320		
EP 373442	B1	19930407		
R: DE, ES, FR, GB, IT, NL				
ES 2053931	T3	19940801	ES 1989-122185	19891201
JP 02214710	A2	19900827	JP 1989-324126	19891215
JP 2933655	B2	19990816		

PRIORITY APPLN. INFO.: DE 1988-3842183 19881215  
 AB Polymers useful in hair care and as coatings are prepd. by radical polymn. of tert-Bu (meth)acrylate 20-90, N-vinylpyrrolidone (I) 10-60, and (hydroxy)alkyl (meth)acrylates and/or vinyl acetate 0-30%. Peroxide-initiated polymn. of 340 g tert-Bu acrylate (II) and 150 g I in EtOH at 75.degree. gave a copolymer (K-value 19.3, glass temp. 75.degree.) with compatibility with 40:60 propane-butane 83% and curl retention as a hair spray (after 5 h at 25.degree. and 90% relative humidity) 93%; vs. 71 and 56, resp., for a 50:40:10 II-I-acrylic acid copolymer.  
 IT 130519-14-1P  
 RL: PREP (Preparation)  
 (hair sprays, manuf. of)  
 RN 130519-14-1 HCAPLUS  
 CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with ethenyl acetate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

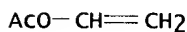
CM 1

CRN 1663-39-4  
 CMF C7 H12 O2



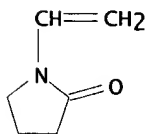
CM 2

CRN 108-05-4  
 CMF C4 H6 O2



CM 3

CRN 88-12-0  
 CMF C6 H9 N O



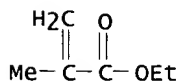
ACCESSION NUMBER: 1968:60237 HCAPLUS  
 DOCUMENT NUMBER: 68:60237  
 TITLE: Simultaneous polymerization and alkylation of heterocyclic N-vinyl monomers to regulate the polymer solubility  
 PATENT ASSIGNEE(S): General Aniline and Film Corp.  
 SOURCE: Brit., 11 pp.  
 CODEN: BRXXAA  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1101163		19680131		

PRIORITY APPLN. INFO.: US 19640408  
 AB The title process gives polymers having soly. characteristics appropriate for a particular use of the polymer, e.g., as hair grooming aids, dispersants for lubricating oils, moisture-resistant adhesives, and dye receptors for resins such as polyethylene and polypropylene. Polymers useful in the formulation of fire-retardant adhesives are also obtained when ClCF:CF<sub>2</sub> is used as the alkylating agent. The alkylating agents used to regulate the polymer soly. are .alpha.-eicosene, .alpha.-dodecene, .alpha.-hexadecene, .alpha.-octadecene, .alpha.-decene, .alpha.-octene, and a C42 .alpha.-olefin (.alpha.-tetradecene trimer). Thus, under N, a mixt. of N-vinyl-2-pyrrolidinone (I) 111, .alpha.-eicosene 140, methylisobutylcarbinol 200, and tert-Bu2O2 7.3 g. was heated at <135.degree. for 16 hrs. to give a product which, after removal of the solvent, was a waxy solid at room temp. All of the I and >97% of the .alpha.-eicosene had reacted. Simultaneous polymn. and alkylation reactions were also carried out with mixts. of the olefins given above and I, N-vinyl-2-piperidinone (II), N-vinyl-epsilon-caprolactam, N-vinyl-5-methyl-2-pyrrolidinone, N-vinyl-2-oxazolidinone, N-vinyl-3-morpholinone (III), N-vinylsuccinimide, N-(methacryloyloxyethyl)pyrrolidinone, mixts. of I with dimethylaminoethyl methacrylate, vinyl acetate, or III, and a mixt. of II with Et methacrylate.  
 IT 30109-08-1P  
 RL: PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)  
 (manuf. of, catalysts for, tert-butyl peroxide as)  
 RN 30109-08-1 HCAPLUS  
 CN Methacrylic acid, ethyl ester, polymer with 1-eicosene and 1-vinyl-2-pyrrolidinone (8CI) (CA INDEX NAME)  
 CM 1  
 CRN 3452-07-1  
 CMF C20 H40

H<sub>2</sub>C=CH-(CH<sub>2</sub>)<sub>17</sub>-Me

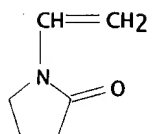
CM 2  
 CRN 97-63-2  
 CMF C6 H10 O2



CM 3

FUBARA 09/762,039

CRN 88-12-0  
CMF C6 H9 N O



R<sub>2</sub> = t-bu esters

FUBARA 09/762,039

=> d ibib abs hitstr 1-4

L55. ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 2001:636116 HCAPLUS  
DOCUMENT NUMBER: 135:200161  
TITLE: Cosmetic compositions containing vinyl  
copolymers with siloxanes  
INVENTOR(S): Nguyen, Kim Son; Wood, Claudia  
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany  
SOURCE: PCT Int. Appl., 50 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001062809	A1	20010830	WO 2001-EP2047	20010222
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
DE 10008263	A1	20010830	DE 2000-10008263	20000223

PRIORITY APPLN. INFO.: DE 2000-10008263 A 20000223

AB The invention relates to cosmetic formulations that contain at least one water-sol. or water-dispersible polymer contg. the following built-in components: (a) 5 to 50 wt. of at least one .alpha.,.beta.-ethylenically unsatd. monomer of general formula CH<sub>2</sub>=CR<sub>1</sub>-CO-X<sub>1</sub>-C(CH<sub>3</sub>)<sub>3</sub>, where R<sub>1</sub> represents hydrogen or C<sub>1</sub>- to C<sub>8</sub>-alkyl and X<sub>1</sub> represents O or NR<sub>2</sub>, R<sub>2</sub> representing hydrogen, C<sub>1</sub>- to C<sub>8</sub>-alkyl or C<sub>5</sub>- to C<sub>8</sub>-cycloalkyl, (b) 25 to 90 wt. of at least one N-vinyl amide and/or N-vinyl lactam, (c) 0.5 to 30 wt. of at least one compd. with a radically polymerizable, .alpha.,.beta.-ethylenically unsatd. double bond and at least one cationogenic and/or cationic group per mol., (d) 0 to 30 wt. of at least one .alpha.,.beta.-ethylenically unsatd. monomer of general formula CH<sub>2</sub>=CR<sub>3</sub>-CO-X<sub>2</sub>-R<sub>4</sub>, where R<sub>3</sub> represents hydrogen or C<sub>1</sub>- to C<sub>8</sub>-alkyl, X<sub>2</sub> represents O or NR<sub>5</sub>, R<sub>5</sub> representing hydrogen, C<sub>1</sub>- to C<sub>8</sub>-alkyl or C<sub>5</sub>- to C<sub>8</sub>-cycloalkyl, and R<sub>4</sub> represents hydrogen or a linear C<sub>1</sub>- to C<sub>22</sub>-alkyl radical; and to their salts. Thus copolymers were prepd. by soln. polymn. using the combination of the following monomers: tert. butylacrylate, butylacrylate, stearyl methacrylate, lauryl acrylate, methacrylic acid, N-vinylpyrrolidone, N-vinylformamide, N-[3-(dimethylamino)propyl]acrylamide, acrylamide, vinylimidazole; also in some compns. ethoxylated polysiloxane (Belsil DMC 6031) was added. The polymers were used in hair sprays, hair gels, creams, shampoos. A hair spray contained (wt./wt.%): polymer prepd. as above 5.00; ethanol 55.00; propane/butane 39.96; perfume, additives q.s.

IT 259795-47-6P 259795-53-4P 356783-86-3P 356783-88-5P

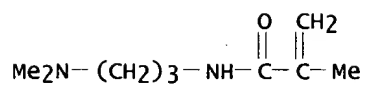
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(cosmetic compns. contg. vinyl copolymers with siloxanes)

RN 259795-47-6 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

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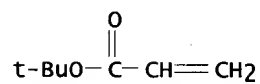
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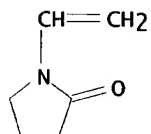
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CM 3

CRN 88-12-0

CMF C6 H9 N O



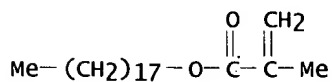
RN 259795-53-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with  
N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl  
2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

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CRN 32360-05-7

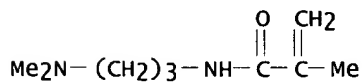
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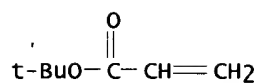
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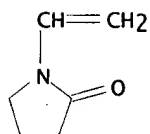
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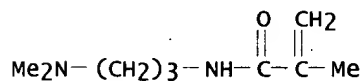


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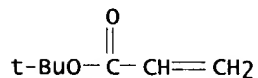
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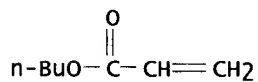
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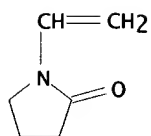
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CRN 141-32-2  
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CM 4

CRN 88-12-0  
CMF C6 H9 N O

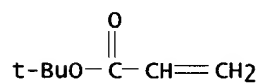




RN 356783-88-5 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-propenoate,  
 1-ethenyl-1H-imidazole, 1-ethenyl-2-pyrrolidinone and 2-propenamide (9CI)  
 (CA INDEX NAME)

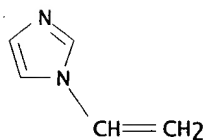
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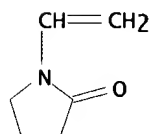
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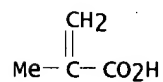
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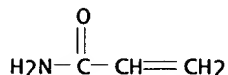
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CM 5

CRN 79-06-1  
CMF C3 H5 N O



REFERENCE COUNT: 3  
REFERENCE(S): (1) Basf; DE 19838196 A 2000 HCAPLUS  
(2) Basf Ag; EP 0373442 A 1990 HCAPLUS  
(3) Isp Investment Inc; WO 9619966 A 1996 HCAPLUS

L55 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1996:732183 HCAPLUS  
DOCUMENT NUMBER: 125:338702  
TITLE: Hair rinse compositions which facilitate repair of split ends consisting of emulsions of water-insoluble adhesive polymers

INVENTOR(S): Ramachandran, Pallassana; Reich, Charles; Hartnett, Donna; Robbins, Clarence; Sackariassen, Kurt; Patel, Amrit

PATENT ASSIGNEE(S): Colgate-Palmolive Company, USA; Ramachandran, Pallassana; Reich, Charles; Hartnett, Donna; Robbins, Clarence; Sackariassen, Kurt; Patel, Amrit

SOURCE: PCT Int. Appl., 70 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9632920	A1	19961024	WO 1996-US5214	19960416
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
AU 9653914	A1	19961107	AU 1996-53914	19960416
EP 822800	A1	19980211	EP 1996-910831	19960416
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
BR 9608160	A	19990209	BR 1996-8160	19960416
PRIORITY APPLN. INFO.: US 1995-421691 19950420				
WO 1996-US5214 19960416				

OTHER SOURCE(S): MARPAT 125:338702

AB Rinse-off hair care compns. consisting essentially of emulsions of water-insol. adhesive polymers having a soly. in water at 25.degree. less than 1.0 % for repairing split ends. Hair rinse compns., in emulsion or dispersion form, which condition the hair and facilitate setting thereof, include a hair conditioning and emulsifying cationic compd., a water insol. acrylic or acrylate polymer and a solvent which is a stabilizing and compatibilizing proportion of the compn. comprising a higher aliph. alc. and/or alc. ethoxylate, in an aq. medium. The cationic compd. is a quaternary ammonium salt preferably a higher alkyl tri-Me ammonium chloride and the polymer is preferably an acrylamide acrylate copolymer. Preferably, solvents in the compns. are C9-20 aliph. alcs. and/or C9-20 alc. ethoxylates having less than 2 ethoxy groups per mol. The preferred emulsion, which is normally of the oil-in-water type, preferably includes propylene glycol and a nonionic surfactant, and the aq. medium is preferably water, or is essentially water. A hair prepn. contained ethoxylated C9-11 alc. 0.2, cetrimonium chloride 1.0, lauryl alc. 6.0, versatyl 42 (octylacrylamide/acrylate copolymer) 1.5, propylene glycol 2.5, and laurtrimonium chloride 1.0%.

IT 63175-62-2, Luviflex vb  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

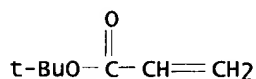
## (Uses)

(hair rinse compns. which facilitate repair of split ends  
consisting of emulsions of water-insol. adhesive polymers)

RN 63175-62-2 HCAPLUS  
CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with  
1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

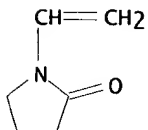
CM 1

CRN 1663-39-4  
CMF C7 H12 O2



CM 2

CRN 88-12-0  
CMF C6 H9 N O



L55 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:255467 HCAPLUS

DOCUMENT NUMBER: 122:38521

TITLE: Conditioning rinse compositions containing emulsifying  
cationic compounds, acrylate polymers, and  
higher aliphatic alcohols

INVENTOR(S): Reich, Charles; Hartnett, Donna A.; Robbins, Clarence  
R.; Sackariassen, Kurt T.; Patel, Amrit M.

PATENT ASSIGNEE(S): Colgate-Palmolive Co., USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9423696	A1	19941027	WO 1994-US3903	19940414
W: AU, BR, DE, JP, KR				
ZA 9402368	A	19951005	ZA 1994-2368	19940405
AU 9467020	A1	19941108	AU 1994-67020	19940414
AU 698345	B2	19981029		
BR 9406477	A	19960123	BR 1994-6477	19940414
DE 4492473	T	19960321	DE 1994-4492473	19940414
US 5693317	A	19971202	US 1995-464201	19950605
PRIORITY APPLN. INFO.:			US 1993-49194	19930419
			US 1991-768144	19910930
			US 1992-822377	19920117
			WO 1994-US3903	19940414
			US 1994-268993	19940630

AB Hair rinse compns., in emulsion of dispersion form, which  
condition the hair and facilitate setting thereof, includes a  
hair conditioning and emulsifying cationic compd., a  
water insol. acrylic or acrylate polymer and a solvent which is a  
stabilizing and compatibilizing proportion of the compn. comprising a

higher aliph. alc. and/or alc. ethoxylate, in a aq. medium. A hair rinse compn. contained C9-11 Prareth-6 (ethoxylated C9-11 alc. of 6 mols of ethylene oxide/mol) 0.2, cetrimonium chloride 1.0, water 87.8, lauryl alc. 6.0, octyl acrylamide/acrylate copolymer (Versatyl 42) 1.5, propylene glycol 2.5, and laurtrimonium chloride 1.0%.

IT 63175-62-2, Luviflex VB

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(conditioning rinse compns. contg. emulsifying cationic compds., acrylate polymers, and higher aliph. alcs.)

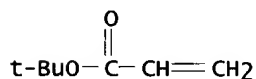
RN 63175-62-2 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

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CRN 1663-39-4

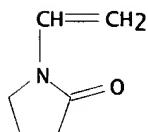
CMF C7 H12 O2



CM 2

CRN 88-12-0

CMF C6 H9 N O



L55 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1993:455700 HCAPLUS

DOCUMENT NUMBER: 119:55700

TITLE: Conditioning rinse compositions which facilitates setting of hair

INVENTOR(S): Reich, Charles; Hartnett, Donna A.; Robbins, Clarence R.; Sackariassen, Kurt T.; Patel, Amrit M.

PATENT ASSIGNEE(S): Colgate-Palmolive Co., USA

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 539251	A2	19930428	EP 1992-402654	19920928
EP 539251	A3	19940202		
EP 539251	B1	19970813		
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, LU, NL, SE				
AU 9222873	A1	19930401	AU 1992-22873	19920909
AU 657156	B2	19950302		
ZA 9206871	A	19940309	ZA 1992-6871	19920909
BR 9203780	A	19930420	BR 1992-3780	19920928
AT 156699	E	19970815	AT 1992-402654	19920928
NO 9203782	A	19930331	NO 1992-3782	19920929
JP 05194160	A2	19930803	JP 1992-261801	19920930
US 5693317	A	19971202	US 1995-464201	19950605

AB A hair-rinse compn. in oil-in-water or dispersion form comprises a quaternary ammonium salt as a conditioning agent, a water-insol. acrylate polymer as a hair-setting agent, and a higher aliph. alc. as a stabilizer in an aq. medium. By a single application of the hair rinse, hair conditioning and hair setting benefits are obtained. For example, a hair rinse contained ethoxylated C9-11 alc. 0.6, cetrimonium chloride 1.0, deionized water 87.8, lauryl alc. 6.0, octylacrylamide-acrylate copolymer 1.5, propylene glycol 2.5, and lauryltrimethylammonium chloride 1.0%.

IT 63175-62-2

RL: BIOL (Biological study)

(hair rinses contg. quaternary ammonium salts and)

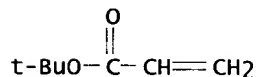
RN 63175-62-2 HCAPLUS

2-Propenoic acid, 1,1-dimethylethyl ester, polymer with  
1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

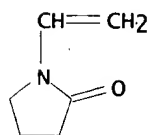
CMF C7 H12 O2



CM 2

CRN 88-12-0

CMF C6 H9 N O



$R_2 = t\text{-bu esters}$

STK 1

FUBARA 09/762,039

=> d ibib abs hitstr 1-9

L57 ANSWER 1 OF 9 HCAPLUS/ COPYRIGHT 2001 ACS  
ACCESSION NUMBER: 1999:779109 HCAPLUS  
DOCUMENT NUMBER: 132:23290  
TITLE: Personal care composition containing a clear  
homogeneous polymer of an N-vinyl lactam  
INVENTOR(S): Liu, Kou-Chang  
PATENT ASSIGNEE(S): Isp Investments Inc., USA  
SOURCE: U.S., 7 pp., Cont.-in-part of U.S. 5,609,865.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 6  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5997855	A	19991207	US 1998-14465	19980128
US 5523369	A	19960604	US 1994-365257	19941228
US 5609865	A	19970311	US 1994-365258	19941228
US 5626836	A	19970506	US 1994-365259	19941228
US 6110454	A	20000829	US 1996-655492	19960530
WO 9938494	A1	19990805	WO 1999-US946	19990113

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KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,  
MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
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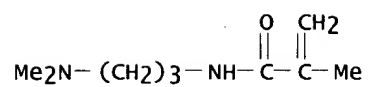
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US 1994-365258 A2 19941228  
US 1994-365259 A2 19941228  
US 1998-14465 A 19980128  
WO 1999-US946 W 19990113

AB The patent describes a multicomponent homogeneous polymer of (a) from about 30 to about 90 wt.-% of a N-vinyl lactam, (b) from about 5 to about 30 wt.-% of a quaternized and/or nonquaternized aminoalkylacrylic ester and/or amide, (c) from about 0.5 to about 30 wt.-% of an unsatd. monomer selected from the group consisting of an acrylic ester or amide having a C4-C22 alkyl group, a C4-C22 .alpha.-olefin, a C4-C22 vinyl ether (VE) and a vinyl ester of a C2-C22 carboxylic acid and (d) from about 1 to about 30 wt.-% of an unsubstituted acrylic or methacrylic acid and/or an unsubstituted amide of said acrylic or methacrylic acid and optionally, (e) up to 20 wt.-% of a mono- or di-functional polysiloxane; all monomers combined to form a 100% polymer compn. of randomly distributed monomers for use in personal care formulations, particularly as a hair fixative where the clear, colorless and conditioning film forming properties of the polymer produces a silky, lustrous appearance to the hair and long lasting styling hold.

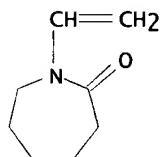
IT 234764-49-9P, Acrylic acid-tert-butyl acrylate-N-(dimethylaminopropyl)methacrylamide-dodecyl methacrylate-N-vinylcaprolactam-N-vinylpyrrolidone copolymer  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(personal hair care compn. contg. clear homogeneous polymer of N-vinyl lactam)

RN 234764-49-9 HCAPLUS  
CN 2-propenoic acid, 2-methyl-, dodecyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl 2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

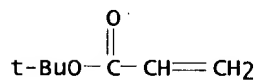
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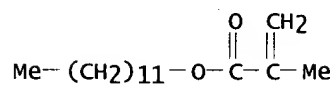
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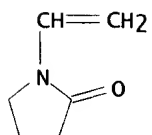
CM 3

CRN 1663-39-4  
CMF C7 H12 O2

CM 4

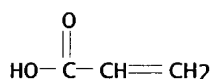
CRN 142-90-5  
CMF C16 H30 O2

CM 5

CRN 88-12-0  
CMF C6 H9 N O

CM 6

CRN 79-10-7  
CMF C3 H4 O2



L57 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:495157 HCAPLUS

DOCUMENT NUMBER: 131:149061

TITLE: Personal care compositions containing a clear homogeneous polymer of an N-vinyl lactam

INVENTOR(S): Liu, Kou-Chang

PATENT ASSIGNEE(S): ISP Investments Inc., USA

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

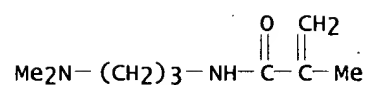
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

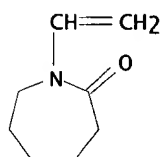
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9938494	A1	19990805	WO 1999-US946	19990113
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 5997855	A	19991207	US 1998-14465	19980128
AU 9922325	A1	19990816	AU 1999-22325	19990113
PRIORITY APPLN. INFO.:				
			US 1998-14465	A 19980128
			US 1994-365257	A2 19941228
			US 1994-365258	A2 19941228
			US 1994-365259	A2 19941228
			WO 1999-US946	W 19990113
AB	A multicomponent homogeneous polymer for cosmetic and hair comps. consists of (a) 30-90% of a N-vinyl lactam, (b) 5- 30% of a quaternized and/or nonquaternized aminoalkylacrylic ester and/or -amide, (c) 0.5-30% of an unsatd. monomer, e.g., C4-22 alkyl, (d) 1-30% of an unsubstituted acrylic or methacrylic acid and/or an its amide, and (e) up to 20% of a mono- or di-functional polysiloxane;. The clear, colorless and conditioning film forming properties of the polymer produce a silky, lustrous appearance to the hair and long lasting styling hold. A homogeneous polymer was prepd. from acrylic acid 10, dimethylaminopropylmethacrylamide 17, octadecyl methacrylate 3, and N-vinylcaprolactam 70%. An EtOH soln. of Vazo-67 as the initiator was added to the monomer mixt. A hair aerosol spray was prepd. by dissolving the polymer in EtOH and adding the required amt. of water.			
IT	234764-49-9p RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (hair formulations contg. homogeneous polymer of vinyl lactam)			
RN	234764-49-9 HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 1,1-dimethylethyl 2-propenoate, 1-ethenylhexahydro-2H-azepin-2-one, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)			
CM	1			
CRN	5205-93-6			
CMF	C9 H18 N2 O			

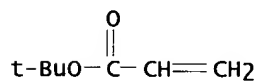




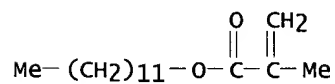
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CRN 2235-00-9  
CMF C8 H13 N O

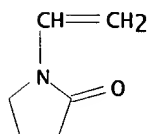
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CRN 1663-39-4  
CMF C7 H12 O2

CM 4

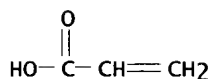
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CMF C16 H30 O2

CM 5

CRN 88-12-0  
CMF C6 H9 N O

CM 6

CRN 79-10-7  
CMF C3 H4 O2

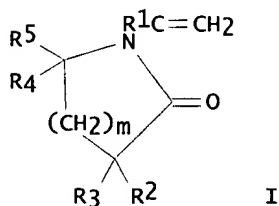


REFERENCE COUNT: 2  
 REFERENCE(S): (1) Liu; US 5492988 A 1996 HCAPLUS  
 (2) Liu; US 5523369 A 1996 HCAPLUS

L57 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1998:430253 HCAPLUS  
 DOCUMENT NUMBER: 129:122988  
 TITLE: N-vinylactam derivative-containing copolymers with improved post-exposure delay stability for chemical amplification photoresists  
 INVENTOR(S): Kim, Jin Baek; Jung, Min Ho; Cheong, Jong Ho  
 PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., S. Korea; Korea Advanced Institute of Science and Technology  
 SOURCE: Ger. Offen., 8 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19721694	A1	19980625	DE 1997-19721694	19970523
US 6051678	A	20000418	US 1997-816305	19970313
FR 2757526	A1	19980626	FR 1997-3888	19970328
FR 2757526	B1	20000114		
NL 1005689	A1	19980623	NL 1997-1005689	19970401
NL 1005689	C2	19990409		
GB 2320500	A1	19980624	GB 1997-8958	19970501
GB 2320500	B2	20010725		
JP 10182754	A2	19980707	JP 1997-145307	19970603
CN 1185449	A	19980624	CN 1997-116326	19970808
US 6262222	B1	20010717	US 1998-168067	19981008
PRIORITY APPLN. INFO.:			KR 1996-68910	A 19961220
			US 1997-816305	A3 19970313

GI



AB Copolymers of N-vinylactam derivs. having the structure I, where R1 = H, C1-10 alkyl, C6-12 aryl, or a trialkylsilyl group with 3-9 carbon atoms, R2 and R3 = H, C1-10 alkyl, C6-12 aryl, a trialkylsilyl group with 3-9 carbon atoms, or OR6, SO3R6, PO3R6, SO2R6, or PO2R6, where R6 = a C 1-10 alkyl, cycloalkyl, heterocyclic group, or C6-12 aryl, R4 and R5 = OH, OR7, where R7 = C1-10 alkyl or C6-12 aryl, or R1, and m = 0-20, are used as photoresist materials in short-wave UV irradiation. (200-300 nm) processes which make it possible to obtain a high sensitivity and dissolution. Ultrafine circuits can be formed and improved post-exposure delay stability is achieved. Thus, 3-(tert-butoxycarbonyl)-1-vinyl-2-caprolactam, prepared by treating N-vinylcaprolactam with di-tert-Bu dicarbonate, was polymerized with acetoxystyrene and tert-Bu acrylate in the presence of AIBN. The copolymer was subjected to base hydrolysis for 10 h at room temperature, neutralized with HOAc, and used to prepare a chem.

amplification photoresist soln. which was spin coated onto a silicon wafer to give a 1.0 .mu.m-thick film. Irradn. with short-wave UV light or a KrF-excimer laser, post exposure baking, and development in an alk. soln. gave pos. resist patterns without T-top formation.

IT 209862-84-0P 209862-86-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of N-vinylactam deriv. copolymers with improved post-exposure delay stability for chem. amplification photoresists)

RN 209862-84-0 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with ethenylphenyl acetate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 59858-52-5

CMF C10 H10 O2

CCI IDS

CDES 8:ID



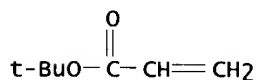
D1-CH=CH2

D1-O-Ac

CM 2

CRN 1663-39-4

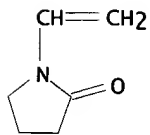
CMF C7 H12 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



RN 209862-86-2 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with 1-ethenylhexahydro-2H-azepin-2-one and ethenylphenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 59858-52-5

CMF C10 H10 O2  
 CCI IDS  
 CDES 8:ID

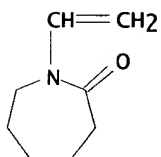


D1-CH=CH2

D1-O-Ac

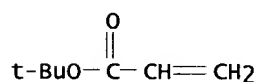
CM 2

CRN 2235-00-9  
 CMF C8 H13 N O



CM 3

CRN 1663-39-4  
 CMF C7 H12 O2



L57 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:38426 HCAPLUS

DOCUMENT NUMBER: 128:145158

TITLE: Water-resistant cosmetic or pharmaceutical agent for use on the skin

INVENTOR(S): Schehlmann, Volker; Schade, Christian; Sanner, Axel; Sperling, Karin; Wekel, Hans-Ulrich

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 14 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19627204	A1	19980108	DE 1996-19627204	19960705
CA 2208870	AA	19980105	CA 1997-2208870	19970620
US 6132705	A	20001017	US 1997-882733	19970626
JP 10067617	A2	19980310	JP 1997-178265	19970703
EP 815839	A2	19980107	EP 1997-111330	19970704

EP 815839 A3 19990616

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.:

DE 1996-19627204 A 19960705

AB A colorless, odorless topical compn. which is water resistant and easy to apply comprises a polymer or copolymer contg. .gtoreq.20 wt.% (meth)acrylate ester produced by radical emulsion or suspension polymn. in the presence of .gtoreq.1 chain transfer agent. The polymer has a glass transition temp. >-35.degree. and contains .ltoreq.0.5 wt.% volatile org. components. Preferably, the polymer comprises C1-30 (meth)acrylate ester (A) 40-100, a water-sol. monomer (B) 0-30, an N-(C1-18-alkyl or -hydroxyalkyl)(meth)acrylamide (C) 0-40, and an addnl. monomer (D) 0-30 wt.%. Preferred monomers are: (A) tert-Bu acrylate, tert-Bu methacrylate, iso-Bu acrylate, and iso-Bu methacrylate; (B) acrylic acid, methacrylic acid, N-vinylpyrrolidone, N-vinylvalerolactam, N-vinylcaprolactam, and hydroxyethyl (meth)acrylate; (C) N-tert-butylacrylamide; (D) vinyl esters and ethers, styrene and derivs., and acryloyloxyalkyl-terminated polydimethylsiloxanes. Thus, an insect-repelling sunscreen contained tert-Bu methacrylate/2-ethylhexyl acrylate/HEMA (80:10:10) copolymer 5.00, cetareth-6 + stearyl alc. 1.00, cetareth-25 1.00, glyceryl stearate 6.00, cetaryl alc. 0.50, iso-Pr palmitate 6.00, octyl methoxycinnamate 3.00, di-Me phthalate 5.00, benzophenone-3 2.00, Carbomer 0.30, di-Na EDTA 0.05, propylene glycol 6.00, preservative, tetra(hydroxypropyl)ethylenediamine 0.55, p-aminobenzoic acid 3.00, perfume oil, and water 60.60 wt.%. The polymer was prepd. by gradually adding the monomer mixt. 450, ethylhexyl thioglycolate (chain transfer agent) 6.75, and initiator 1.1 to a soln. of emulsifier 3.9 in H2O 850 g at 80.degree., stirring for 1.5 h at 80.degree., adding a redox system to complete polymn., passing steam through the emulsion to strip out volatile components, and spray drying. The glass transition temp. of the polymer was 66.degree..

IT 130519-13-0 202287-41-0

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(water-resistant cosmetic or pharmaceutical agent for use on skin)

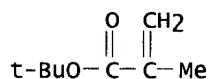
RN 130519-13-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 585-07-9

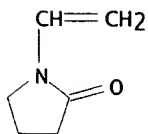
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CM 2

CRN 88-12-0

CMF C6 H9 N O



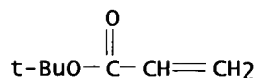
RN 202287-41-0 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

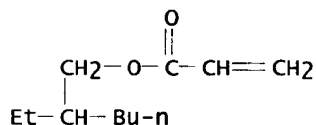
CMF C7 H12 O2



CM 2

CRN 103-11-7

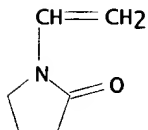
CMF C11 H20 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



L57 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1993:656283 HCAPLUS

DOCUMENT NUMBER: 119:256283

TITLE: Hair preparations containing trimethylsiloxysilane-contg. vinyl polymers

INVENTOR(S): Uchama, Jujiro; Ogasawara, Motomi

PATENT ASSIGNEE(S): Osaka Juki Kagaku Kogyo Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05213722	A2	19930824	JP 1992-23692	19920210
JP 3086522	B2	20000911		

AB A mixt. comprising CH<sub>2</sub>:CR<sub>1</sub>CO<sub>2</sub>H (R<sub>1</sub> = H, Me) 10-30, CH<sub>2</sub>:CR<sub>1</sub>CO<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>Si(OSiMe<sub>3</sub>)<sub>3</sub> (R<sub>1</sub> = same as above) and/or CH<sub>2</sub>:CHSi(OSiMe<sub>3</sub>)<sub>3</sub> 1-20, CH<sub>2</sub>:CR<sub>1</sub>COR<sub>2</sub> (R<sub>1</sub> = same as above; R<sub>2</sub> = C<sub>1</sub>-4 alkoxy, amide) 20-85, and N-vinylpyrrolidone 0-40 wt.% is polymd. to give a material useful in prepg. hair conditioners. The compns. show good hair-setting property and give gloss and smoothness to the hair. A hair prepn. contg. methacrylic acid-tert-Bu methacrylate-methacryloxypropyltris(trimethylsiloxy)silane copolymer aminomethylpropanol salt (prepn. given) was prepd.

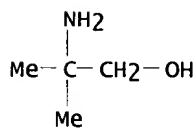
IT 151372-09-7P 151372-19-9P 151372-31-5P  
151372-33-7P  
RL: PREP (Preparation)

(prepn. of, hair preps. contg.)

RN 151372-09-7 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl  
 2-methyl-2-propenoate, 3-ethenyl-1,1,1,5,5,5-hexamethyl-3-  
 [(trimethylsilyl)oxy]trisiloxane and 1-ethenyl-2-pyrrolidinone, compd.  
 with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
 CMF C4 H11 N O

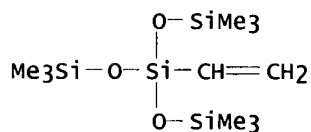


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CRN 151372-08-6  
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 CCI PMS

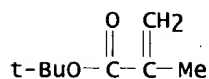
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CRN 5356-84-3  
 CMF C11 H30 O3 Si4



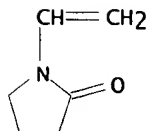
CM 4

CRN 585-07-9  
 CMF C8 H14 O2



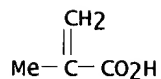
CM 5

CRN 88-12-0  
 CMF C6 H9 N O



CM 6

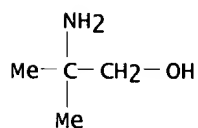
CRN 79-41-4  
CMF C4 H6 O2



RN 151372-19-9 HCAPLUS  
CN 2-Propenoic acid, polymer with 1,1-dimethylethyl 2-propenoate, 3-ethenyl-1,1,1,5,5,5-hexamethyl-3-[(trimethylsilyl)oxy]trisiloxane and 1-ethenyl-2-pyrrolidinone, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
CMF C4 H11 N O

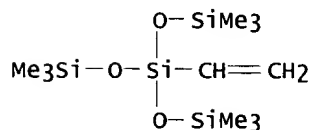


CM 2

CRN 151372-18-8  
CMF (C11 H30 O3 Si4 . C7 H12 O2 . C6 H9 N O . C3 H4 O2)x  
CCI PMS

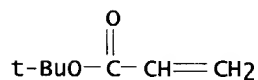
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CRN 5356-84-3  
CMF C11 H30 O3 Si4



CM 4

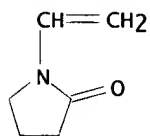
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CMF C7 H12 O2



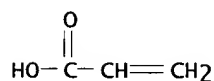
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CMF C6 H9 N O





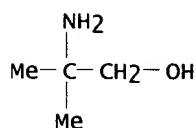
CM 6

CRN 79-10-7  
CMF C3 H4 O2

RN 151372-31-5 HCAPLUS

CN 2-Propenoic acid, polymer with 1,1-dimethylethyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 3-ethenyl-1,1,1,5,5,5-hexamethyl-3-[(trimethylsilyl)oxy]trisiloxane and 1-ethenyl-2-pyrrolidinone, compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
CMF C4 H11 N O

CM 2

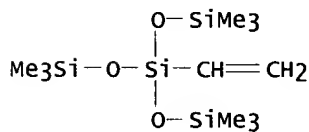
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CMF (C11 H30 O3 Si4 . C9 H15 N O2 . C7 H12 O2 . C6 H9 N O . C3 H4 O2)x  
CCI PMS

CM 3

CRN 5356-84-3

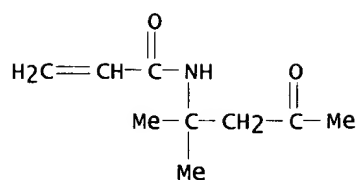
CMF C11 H30 O3 Si4



CM 4

CRN 2873-97-4

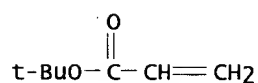
CMF C9 H15 N O2



CM 5

CRN 1663-39-4

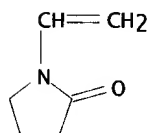
CMF C7 H12 O2



CM 6

CRN 88-12-0

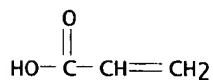
CMF C6 H9 N O



CM 7

CRN 79-10-7

CMF C3 H4 O2



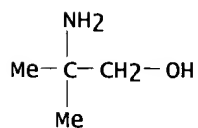
RN 151372-33-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl  
2-methyl-2-propenoate, ethenyl acetate, 3-ethenyl-1,1,1,5,5,5-hexamethyl-3-  
[(trimethylsilyl)oxy]trisiloxane and 1-ethenyl-2-pyrrolidinone, compd.  
with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5

CMF C4 H11 N O

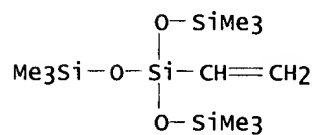


CM 2

CRN 151372-32-6  
CMF (C11 H30 O3 Si4 . C8 H14 O2 . C6 H9 N O . C4 H6 O2 . C4 H6 O2)x  
CCI PMS

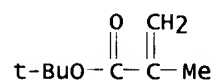
CM 3

CRN 5356-84-3  
CMF C11 H30 O3 si4



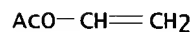
CM 4

CRN 585-07-9  
CMF C8 H14 O2



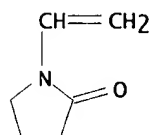
CM 5

CRN 108-05-4  
CMF C4 H6 02



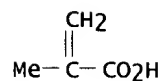
CM 6

CRN 88-12-0  
CMF C6 H9 N O



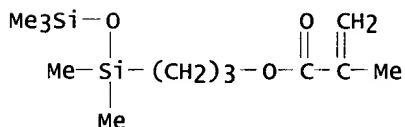
CM 7

CRN 79-41-4  
CMF C4 H6 02

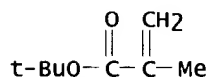


DOCUMENT NUMBER: 117:257967  
 TITLE: Hair preparations containing acrylate polymers  
 INVENTOR(S): Uchiyama, Yujiro; Ogasawara, Motomi  
 PATENT ASSIGNEE(S): Osaka Yuki Kagaku Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

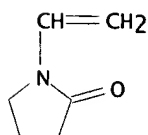
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 04154712	A2	19920527	JP 1990-277237	19901015
AB	A hair prepn. which gives luster and body to the hair contains copolymers of acrylic acid esters, N-vinylpyrrolidone, and ethylene-type unsatd. monomers. Thus, 85 % dimethylaminoethyl methacrylate sulfate-EtOH soln. 47, methacryloxypropyl(trimethylsiloxy)dimethylsilane 10, tert-Bu methacrylate 50, and anhyd. EtOH 143 parts by wt. were mixed and polymd. in the presence of a polymn. initiator. The product was dissolved in EtOH to give a hair prepn.				
IT	144770-75-2 144770-76-3	RL: BIOL (Biological study) (hair preps. contg.)			
RN	144770-75-2	HCAPLUS			
CN	Ethanaminium, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethyl sulfate, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	18151-85-4				
CMF	C12 H26 O3 Si2				



CM 2  
 CRN 585-07-9  
 CMF C8 H14 O2



CM 3  
 CRN 88-12-0  
 CMF C6 H9 N O



CM 4

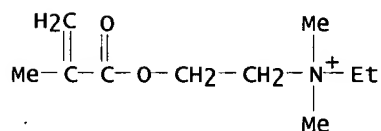
CRN 13223-03-5

CMF C10 H20 N O2 . C2 H5 O4 S

CM 5

CRN 48063-69-0

CMF C10 H20 N O2



CM 6

CRN 48028-76-8

CMF C2 H5 O4 S

Et-O-SO<sub>3</sub><sup>-</sup>

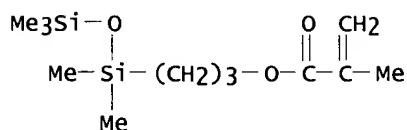
RN 144770-76-3 HCAPLUS

CN Ethanaminium, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethyl sulfate, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 18151-85-4

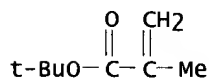
CMF C12 H26 O3 Si2



CM 2

CRN 585-07-9

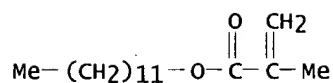
CMF C8 H14 O2



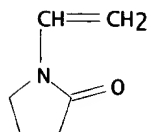
CM 3

CRN 142-90-5

CMF C16 H30 O2



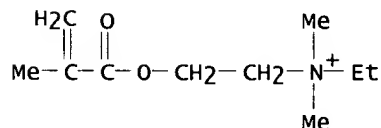
CM 4

CRN 88-12-0  
CMF C6 H9 N O

CM 5

CRN 13223-03-5  
CMF C10 H20 N O2 . C2 H5 O4 S

CM 6

CRN 48063-69-0  
CMF C10 H20 N O2

CM 7

CRN 48028-76-8  
CMF C2 H5 O4 SEt-O-SO<sub>3</sub><sup>-</sup>

L57 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1991:410412 HCAPLUS

DOCUMENT NUMBER: 115:10412

TITLE: Preparation and uses of epoxy resin-acrylate copolymer  
blend pressure-sensitive thermosetting adhesives

INVENTOR(S): Sato, Shinobu; Kitano, Shuichi

PATENT ASSIGNEE(S): Minnesota Mining and Mfg. Co., USA

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

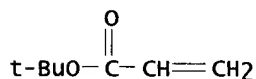
PATENT NO:	KIND	DATE	APPLICATION NO.	DATE
EP 386909	A2	19900912	EP 1990-301964	19900223
EP 386909	A3	19920318		
EP 386909	B1	19960110		

R: BE, DE, ES, FR, GB, IT, SE  
 CA 2009566 AA 19900909 CA 1990-2009566 19900208  
 AU 9049895 A1 19900913 AU 1990-49895 19900216  
 AU 615136 B2 19910919  
 ES 2081926 T3 19960316 ES 1990-301964 19900223  
 JP 02272076 A2 19901106 JP 1990-57815 19900308  
 JP 07015090 B4 19950222

PRIORITY APPLN. INFO.: US 1989-321571 19890309  
 AB Pressure-sensitive thermosetting adhesives, having excellent adhesion to metals and storage properties, and useful in structural bonding of components to metal surfaces, comprise a blend of (A) photopolymerizable prepolymer contg. an acrylic ester of a nontertiary C4-12 alc. 30-18; (B) an epoxy resin or mixt. of epoxy resins contg. no photopolymerizable groups 20-60; (C) heat-activatable curing agent 0.5-20; (D) a photoinitiator 0.01-5; and (E) a photocrosslinking agent 0-5 wt.%. Thus, 71:29 isoocetyl acrylate-N-vinylpyrrolidone copolymer was mixed with Irgacure, Epon 828 resin, dicyandiamined hardener, and Monuron accelerator, degassed, coated on a polyester liner having a silicon release coating, covered with a transparent liner and photopolymd. to give a pressure-sensitive transfer tape showing elongation 456%, cured Instron foam strength 5762 kPa, painted steel panel dynamic shear strength 2557.8 kPa.  
 IT 63175-62-2  
 RL: USES (Uses)  
 (rubber, epoxy resin blends, adhesives, pressure-sensitive, for metals)  
 RN 63175-62-2 HCAPLUS  
 CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

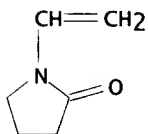
CM 1

CRN 1663-39-4  
 CMF C7 H12 O2



CM 2

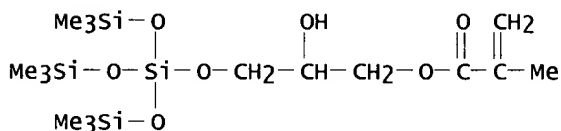
CRN 88-12-0  
 CMF C6 H9 N O



L57 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1989:639578 HCAPLUS  
 DOCUMENT NUMBER: 111:239578  
 TITLE: Staining-resistant contact lenses with high oxygen permeability  
 INVENTOR(S): Kubota, Satoshi; Mogami, Takao; Murata, Takashige; Amaya, Naoyuki; Takaoka, Toshiaki  
 PATENT ASSIGNEE(S): Seiko Epson Corp., Japan; Nippon Oils and Fats Co., Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

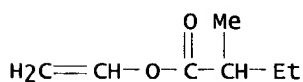
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 63301919	A2	19881208	JP 1987-138385	19870602
AB	The title lenses consist of polymers contg. units of siloxanyl (meth)acrylates $\text{CH}_2:\text{CR}1\text{CO}_2(\text{CH}_2\text{CH}_2\text{O})_k[\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{O}]_l(\text{CH}_2)_m\text{Si}(\text{R}_2)_n[(\text{OSiR}_3\text{R}_4)_p\text{R}_5]_{3-n}$ ( $k = 0-3$ ; $l = 0-1$ ; $m = 1-3$ ; $n = 0-3$ ; $p = 1-5$ ; $\text{R}_1 = \text{H, Me}$ ; $\text{R}_2, \text{R}_5 = \text{C}_1-6$ org. group; $\text{R}_3, \text{R}_4 = \text{hydrocarbyl, trimethylsiloxy}$ ), vinyl esters $\text{R}_6\text{CO}_2\text{CH}:\text{CH}_2$ ( $\text{R}_6 = \text{C}_1-12$ alkyl; aryl, aralkyl), and vinyl acrylates, vinyl methacrylates, allyl acrylates, and/or allyl methacrylate. Thus, 40 parts [methylbis(trimethylsiloxy)silyl]propyl methacrylate (I) was copolymd. with 45 parts vinyl isobutanoate and 15 parts vinyl methacrylate to give a copolymer, which was cut to give a contact lens with 0 permeation rate 4.1 .times. 10-10 mL-cm/cm <sup>2</sup> -s-mmHg and no lysozyme adhesion on immersion of the lens in 0.2% biolog. saline soln. for 7 days at 37.degree.. A contact lens prepd. from a copolymer of I, Me methacrylate, and triethylene glycol dimethacrylate had 0 permeation rate 1.2 .times. 10-10 mL-cm/cm <sup>2</sup> -s-mmHg.				
IT	124124-83-0	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (contact lens manuf. with)			
RN	124124-83-0	HCAPLUS			
CN	Butanoic acid, 2-methyl-, ethenyl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, ethenyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and 2-hydroxy-3-[[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]oxy]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	124124-82-9				
CMF	C16 H38 O7 Si4				



CM 2

CRN 120675-62-9

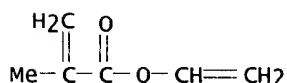
CMF C7 H12 O2



CM 3

CRN 4245-37-8

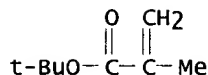
CMF C6 H8 O2



CM 4

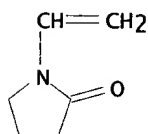


CRN 585-07-9  
CMF C8 H14 O2



CM 5

CRN 88-12-0  
CMF C6 H9 N O



L57 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1988:450984 HCAPLUS

DOCUMENT NUMBER: 109:50984

TITLE: Preparation and use of crosslinked hydrogel materials as image contrast agents in proton nuclear magnetic resonance tomography and tissue phantom kits containing such materials

INVENTOR(S): Beall, Paula T.

PATENT ASSIGNEE(S): Ciba-Geigy Corp., USA

SOURCE: U.S., 6 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4729892	A	19880308	US 1986-842337	19860321
CA 1279819	A1	19910205	CA 1987-532415	19870319
			US 1986-842337	19860321

PRIORITY APPLN. INFO.:

AB Crosslinked hydrogel materials in the swollen state exhibit a range of NMR spin d. values, spin-lattice or longitudinal relaxation (T1) values, and spin-spin or transverse relaxation (T2) values embracing that of the spectrum of values assocd. with animal and human tissues, thereby rendering such materials useful as contrast agents in NMR tomog. Crosslinked hydrogel materials having T1 and T2 values substantially shorter than the surrounding tissue are useful as image contrast agents for the gastrointestinal tract. A macromer (MAC) of poly(tetramethylene oxide) glycol (av. mol. wt. .apprx.2000) end-capped with isophorone diisocyanate (2 mol/mol glycol) and terminated with 1 mol 2-hydroxyethyl methacrylate/mol diisocyanate was reacted with various amts. of monomers to obtain crosslinked hydrogels, 2 of which are esp. useful as image contrast agents due to their high contrast: hydrogen I contg. MAC 30, Me methacrylate 42, and dimethylacrylamide 28%; and hydrogel II contg. MAC 210, N-vinylpyrrolidone 45, and 2-hydroxyethyl methacrylate 35%. Swollen with water, I contained 25.4 and II contained 49.0% water. Their T1 and T2 values at 5 MHz were 34 and 4 (I) and 43 and 4 ms (II) and at 30 MHz their resp. T1 values were 259 and 252 ms.

IT 115381-82-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, for proton NMR tomog.)

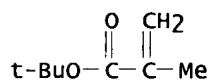
RN 115381-82-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 1-ethenyl-2-pyrrolidinone and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-

butanediyl) ester with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester (1:2) (9CI) (CA INDEX NAME)

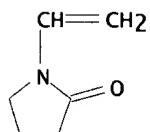
CM 1

CRN 585-07-9  
CMF C8 H14 O2



CM 2

CRN 88-12-0  
CMF C6 H9 N O

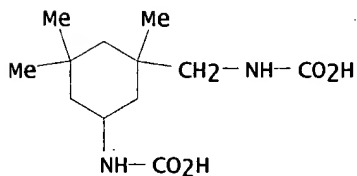


CM 3

CRN 115381-80-1  
CMF (C4 H8 O)<sub>n</sub> C36 H58 N4 O11  
CCI IDS, PMS  
CDES 8:ID

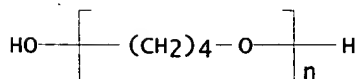
CM 4

CRN 52337-42-5  
CMF C12 H22 N2 O4



CM 5

CRN 25190-06-1  
CMF (C4 H8 O)<sub>n</sub> H2 O  
CCI PMS



CM 6

CRN 868-77-9

CMF C6 H10 O3

